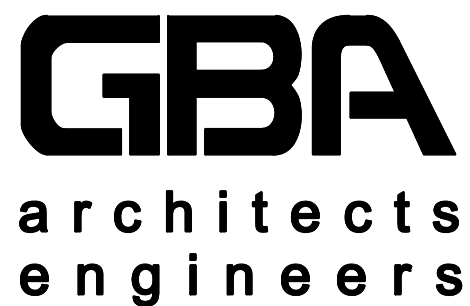


NEW CAMPGROUND

MISSOURI STATE FAIRGROUNDS

Sedalia, Missouri



9801 Renner Boulevard
Lenexa, Kansas 66219
913.492.0400
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Engineering COA# 000133
Architecture COA# 000212
Land Surveying COA# 000059

OWNER: STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

DEPARTMENT OF
AGRICULTURE

PROJECT
MANAGEMENT: OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DESIGNER: George Butler Associates, Inc.

PROJECT NUMBER: F1901-01

SITE NUMBER: 1501

ASSET NUMBER: 3511501140

SHEET NUMBER:

G-001

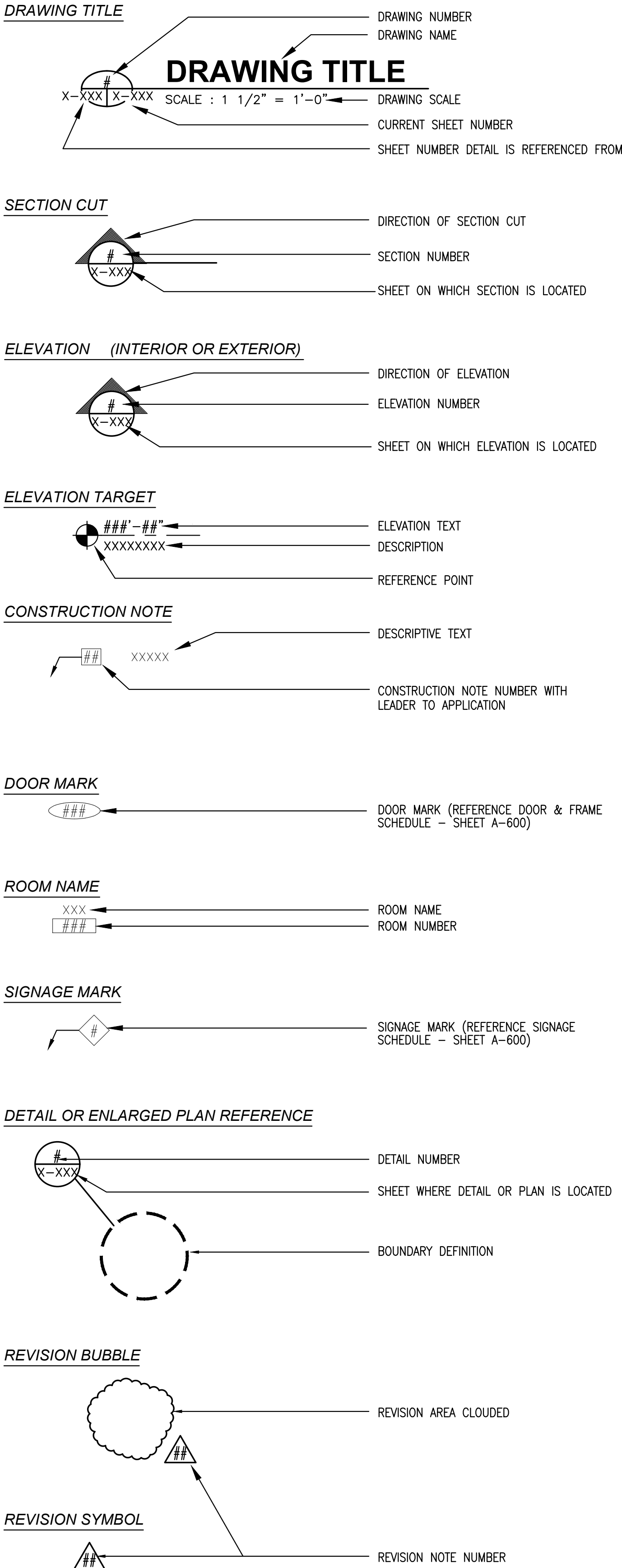
01 OF 14 SHEETS
AUGUST 22, 2019

ABBREVIATIONS

A	
AB	ANCHOR BOLT
ABV	ABOVE
AC	ACOUSTICAL
A/C	AIR CONDITIONING
ACT	ACOUSTICAL TILE
ADJ.	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AGG	AGGREGATE
ALT	ALTERNATE
ALUM	ALUMINUM
ANCH	ANCHOR, ANCHORAGE
AP	ACCESS PANEL
APPD	APPROVED
APPROX.	APPROXIMATE
ARCH	ARCHITECT(URAL)
AUTO	AUTOMATIC
AVG.	AVERAGE
B	
BD	BOARD
BE	BELOW
BETW	BETWEEN
BEV	BEVELED
BLKG	BLOCK(ING)
BLDG.	BUILDING
BM	BEAM
BOT	BOTTOM
BRG	BEARING
BRK	BRICK
BSMT	BASEMENT
BTU	BRITISH THERMAL UNIT
C	
CAB	CABINET
CAP	CAPACITY
CEM	CEMENT
CER	CERAMIC
CG	CORNER GUARD
CHAM	CHAMFER
CHDB	CHALKBOARD
CIR	CIRCLE
CIRC	CIRCUMFERENCE
CU	CONTROL JOINT
CK	CAULK(ING)
CL	CENTER LINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR(ANCE)
CLS	CLOSURE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPRESS(ED),(ION),(IBLE)
CONC.	CONCRETE
CONF.	CONFERENCE
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS OR CONTINUE
CONTR.	CONTRACT(OR)
CORR	CORRIDOR
CPT	CARPET(ED)
CS	COUNTERSINK
CT	CERAMIC TILE
CU FT	CUBIC FOOT (FEET)
CU YD	CUBIC YARD(S)
CW	COLD WATER
D	
D	DEPTH
DEG	DEGREE(S)
DEPT.	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DM	DIMENSION
DIV.	DIVISION
DN.	DOWN
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING
E	
E	EAST
EA.	EXPANSION BOLT
EL.	ELEVATION
ELEC.	ELECTRIC(AL)
ELEV.	ELEVATOR
ENG.	ENGINEER
EQ.	EQUAL
EQUIP	EQUIPMENT
EXP.	EXPOSED
EXH	EXHAUST
EXIST	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
F	
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FPE	FINISHED FLOOR ELEVATION
FHC	FIRE HOSE CABINET
FIN	FINISH(ED)
FLEX	FLEXIBLE
FLG	FLASHING
FLR	FLOOR(ING)
FR	FIRE RATED
FT	FOOT(FEET)
FTG	FOOTING
FUR	FURRED, FURRING
G	
GA	GAGE, GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACT(OR)
GD	GRADE, GRADING
GKT	GASKET(ED)
GL	GLASS, GLAZING
GYP BD	GYP SUM BOARD
H	
HB	HOSE BIB
HC	HOLLOW CORE
HCP	HANDICAP(PED)
HD	HEAD
HDW	HARDWARE
HEX	HEXAGONAL
HM	HOLLOW METAL
HORIZ	HORIZONTAL
H.P.	HIGH POINT
HT	HEIGHT
HTG	HEATING
HVAC	HEATING/ VENTILATION/ AIR CONDITIONING
HW	HOT WATER
I	
ID	INSIDE DIAMETER
IN	INCH(ES)
INCL.	INCLUDE(D), (ING)
INFO	INFORMATION
INSUL	INSULATE(D), (ION)
INT	INTERIOR

J	
JAN	JOIST
JT	JANITOR
JOINT	JOINT
K	
KIT	KITCHEN
KO	KNOCKOUT
L	
LENGTH	LENGTH
LAM	LAMINATE(D)
LAT.	LATERAL
LAV	LAVATORY
LB	POUND(S)
LH	LEFT HAND
LIN	LINEAR
LL	LIVE LOAD
L.P.	LOW POINT
LT	LIGHT
LTG	LIGHTING
LTL	LINTEL
LVR	LOUVER
M	
MAN	MANUAL
MAS	MASONRY
MAX.	MAXIMUM
MECH.	MECHANIC(AL)
MED.	MEDIUM
MEZZ	MEZZANINE
MFR.	MANUFACTURE(R), (D)
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL
MULL	MULLION
N	
N	NORTH
N.I.C.	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
N.T.S.	NOT TO SCALE
O	
OA	OVERALL
OC	ON CENTER(S)
OD	OUTSIDE DIAMETER
OFF	OFFICE
OH	OVERHEAD
OPNG	OPENING
OZ	OUNCE(S)
P	
PBD	PARTICLE BOARD
PC	PRECAST CONCRETE
PERF	PERFORATE(D)
PERIM	PERIMETER
PL	PLATE
P.L.	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PLF	POUNDS PER LINEAR FOOT
PNL	PANEL
POL	POLISHED(ED)
PR	PAIR
PREFAB	PREFABRICATE(D)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PAINT(ED)
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PTR	PAPER TOWEL RECEPTOR
PVC	POLYVINYL CHLORIDE
PL WD	PLYWOOD
Q	
QT	QUARRY TILE
QTY	QUANTITY
R	
R	RISER
RAD	RADIUS
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REV	REVISION, REVISE(D)
RECP	RECEPTACLE
REF.	REFERENCE
REFL	REFLECT(ED), (IVE)
REG.	REGISTER
REINF	REINFORCE(D), (ING)
REQ.	REQUIRED
RH	RIGHT HAND
RM.	ROOM
RO	ROUGH OPENING
S	
S	SOUTH
SCHED	SCHEDULE
SD	SOAP DISPENSER
SECT	SECTION
SF	SQUARE FOOT (FEET)
SG	SINGLE
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION
SQ.	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURE, STRUCTURAL
SUSP	SUSPEND, SUSPENDED
T	
T.O.	TOP OF
TEMP	TEMPERATURE
T&G	TONGUE & GROOVE
THK	THICK(NESS)
THRU	THROUGH
TYP	TYPICAL
U	
UL	UNDERWRITERS LABORATORY
UNEXC	UNEXCAVATED
UNO	UNLESS NOTED OTHERWISE
V	
VAPB	VAPOR BARRIER
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
W	
W	WEST
W	WIDTH
W/	WITH
WD	WOOD
WNDW	WINDOW
W/O	WITHOUT
WPT	WORKING POINT
WT	WEIGHT
WWF	WELDED WIRE FABRIC
YD	YARD

SYMBOLS



DRAWING NO. SYSTEM

ARCHITECTURAL DRAWINGS ARE DIVIDED INTO EIGHT SPECIFIC GROUPS (A-0 - A-7); THE GROUP NUMBER WILL ALWAYS REMAIN THE SAME NO MATTER HOW LARGE OR SMALL THE PROJECT. ADDITIONAL DRAWINGS MAY BE ADDED TO GROUPS WITHOUT INTERRUPTING THE ALPHANUMERIC ORDER.

E-300

DISCIPLINE DESIGNATOR

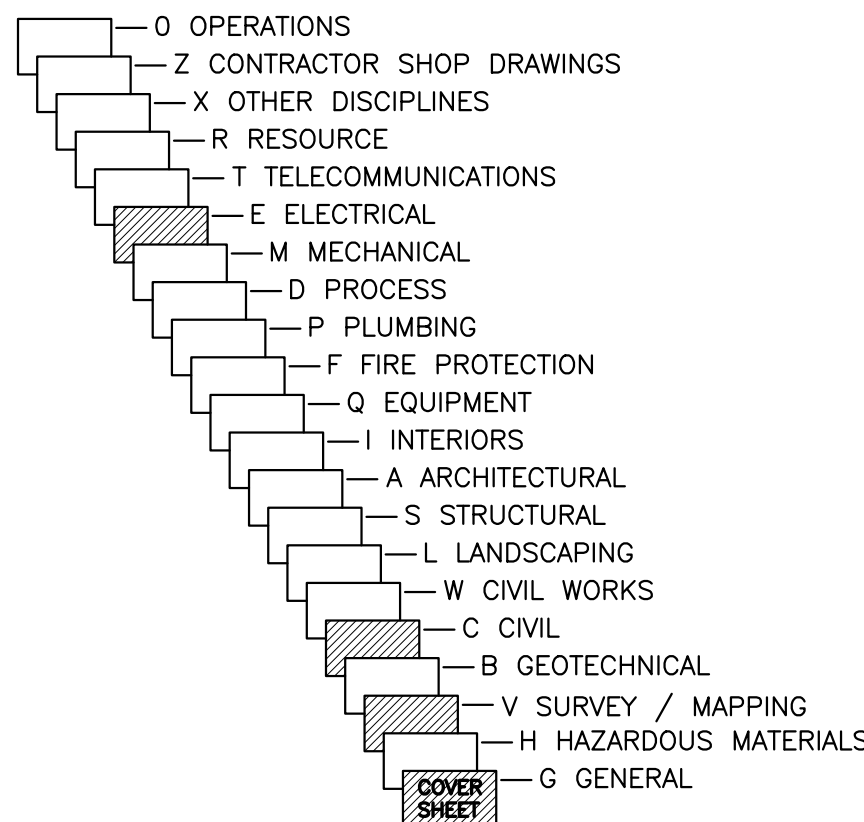
A ARCHITECTURAL
C CIVIL
E ELECTRICAL
F FIRE PROTECTION
G GENERAL
H HAZARDOUS MATERIAL
I INTERIORS
L LANDSCAPE
M MECHANICAL
P PLUMBING
Q EQUIPMENT
R RESOURCES
S STRUCTURAL
T TELECOMMUNICATIONS
X OTHER DISCIPLINES
Z CONTRACTOR/SHOP DRAWINGS

SHEET TYPE DESIGNATORS

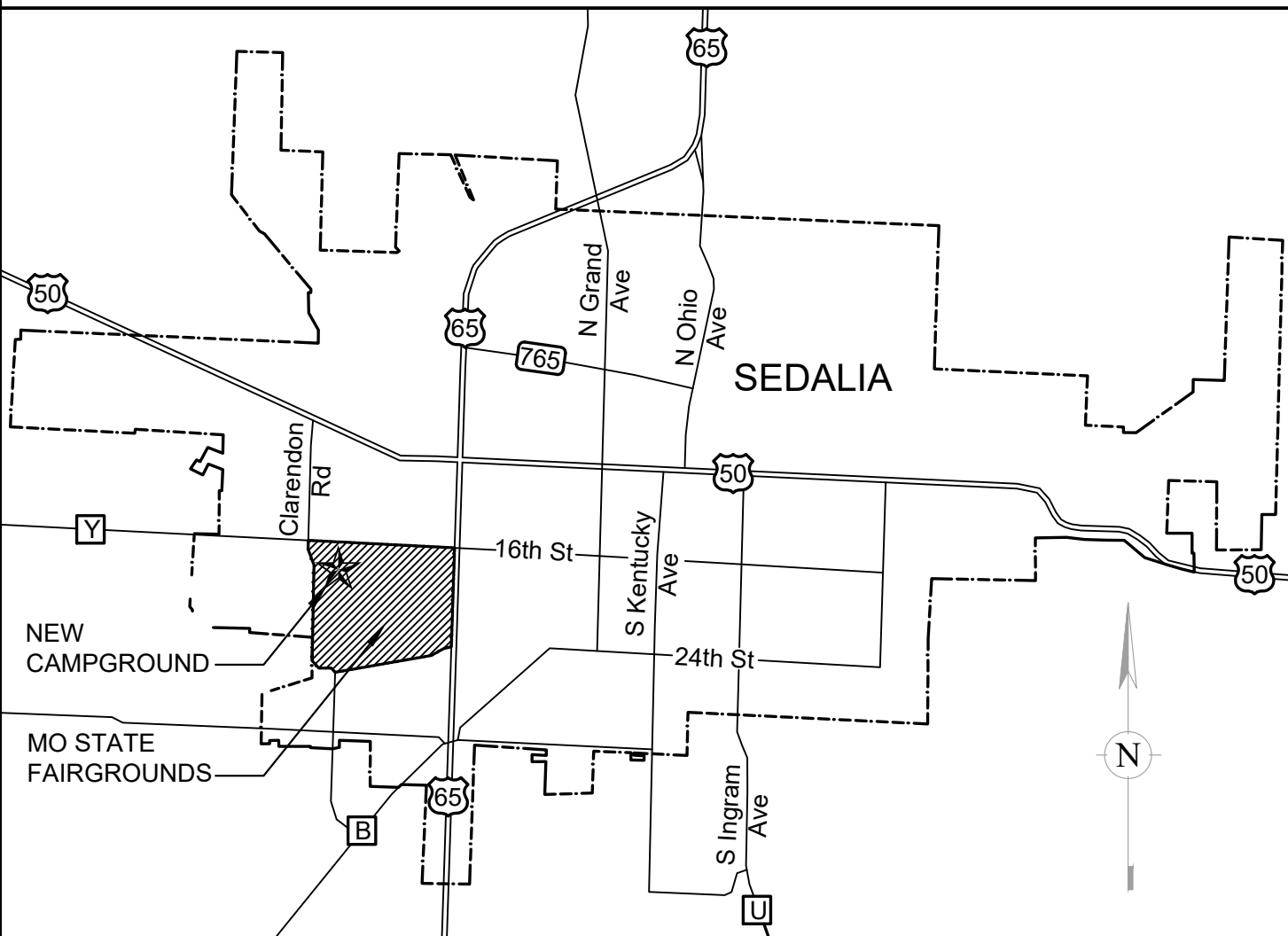
0 GENERAL (SYMBOLS, LEGENDS, MAPS, NOTES, ETC.)
1 PLANS
2 ELEVATIONS (VERTICAL VIEWS)
3 SECTIONS (SECTIONAL VIEWS)
4 LARGE SCALE VIEWS (ENLARGED PLANS OR ELEVATIONS, WALL OR STAIR SECTIONS ETC.)
5 DETAILS
6 SCHEDULES AND DIAGRAMMS
7 REFLECTED CEILING PLANS

DRAWING ORGANIZATION

INDICATES SHEETS INCLUDED IN THIS SET.



LOCATION MAP



DRAWING INDEX

GENERAL INFORMATION

G-001 COVER SHEET
G-002 GENERAL INFO.

CIVIL

C-101 CAMPGROUND DEMOLITION PLAN
C-102 CAMPGROUND GRADING & EROSION CONTROL PLAN
C-103 CAMPGROUND GRADING PLAN
C-104 CAMPGROUND DIMENSION PLAN
C-105 CAMPGROUND SANITARY PLAN
C-106 CAMPGROUND WATER LINE PLAN
C-201 CAMPGROUND STREET PROFILES
C-501 CONSTRUCTION DETAILS
V-101 CAMPGROUND SURVEY

STRUCTURAL

ARCHITECTURAL

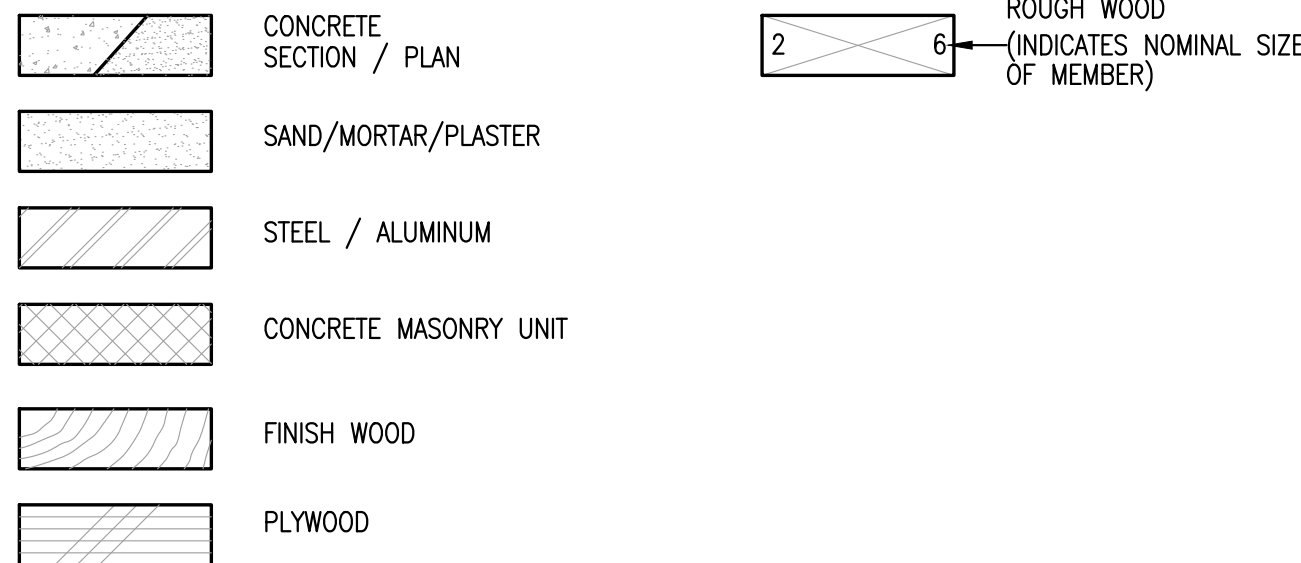
PLUMBING

MECHANICAL

ELECTRICAL

E-001 ELECTRICAL INDEX & TYPICAL LAYOUT DIAGRAMS
E-101 CAMPGROUND & UTILITY PLAN
E-401 ELECTRICAL PANELBOARD SCHEDULES

MATERIAL INDICATIONS



A/E INFORMATION

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Lenexa, Kansas 66219-9745
Contact: Harland Russe
Phone: 913-577-8207

ELECTRICAL ENGINEER

George Butler Associates, Inc.
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STATE OF MISSOURI
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DEPARTMENT OF
AGRICULTURE

NEW CAMPGROUND

MISSOURI STATE
FAIRGROUNDS

2503 W. 16th STREET
SEDALIA, MO 65301

PROJECT # F1901-01

SITE # 1501

ASSET # 3511501140

REVISION: _____

DATE: _____

REVISION: _____

DATE: _____

REVISION: _____

DATE: _____

ISSUE DATE: 08/22/2019

CAD DWG FILE: F1901-01-1501-G-002

DRAWN BY: BKS

CHECKED BY: VRK

DESIGNED BY: BKS

SHEET TITLE:

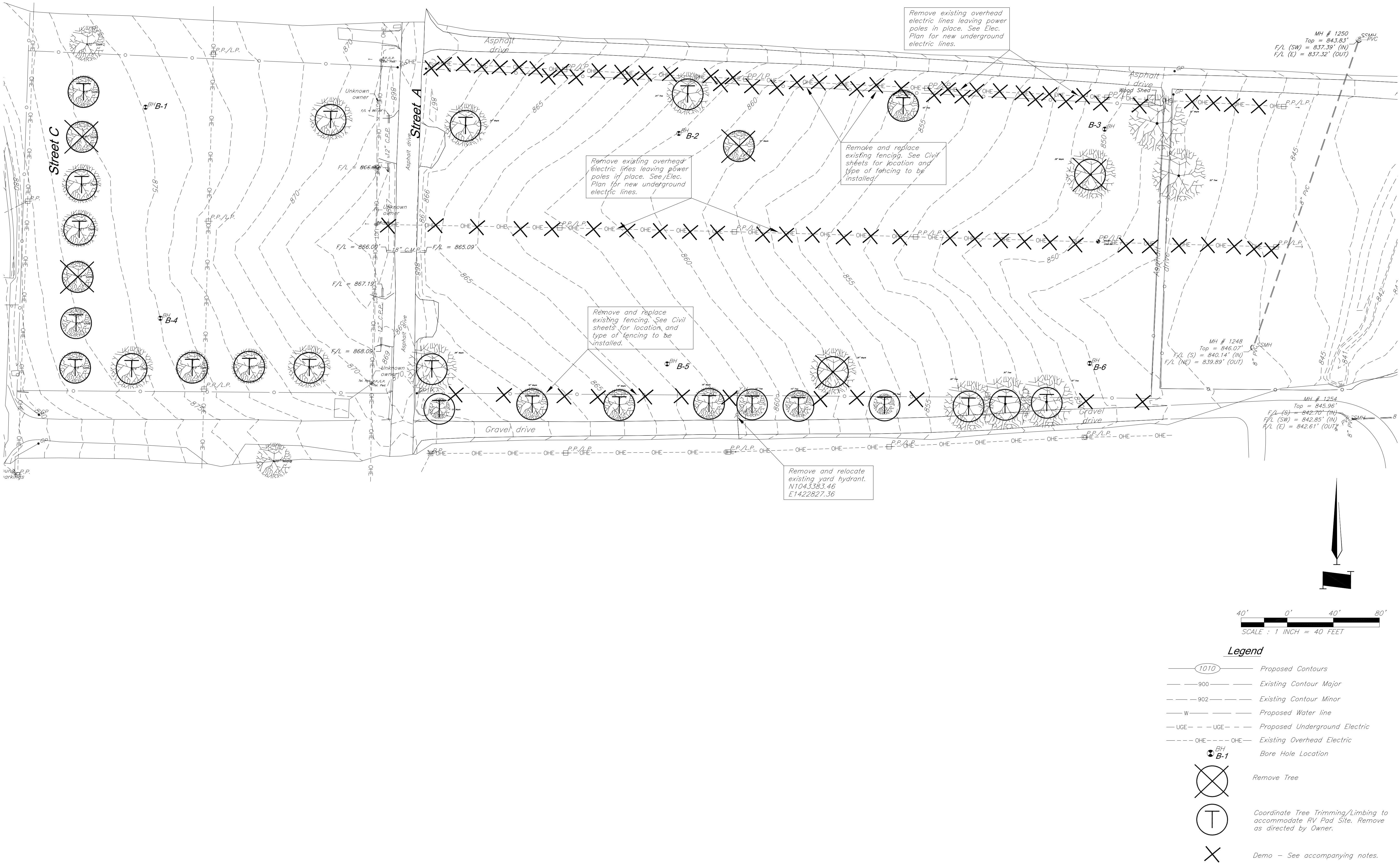
GENERAL INFO.

SHEET NUMBER:

G-002

SHEET 02 OF 14

08/22/2019



STATE OF MISSOURI
MICHAEL L. PARSON,
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NEW CAMPGROUND

MISSOURI STATE
FAIRGROUNDS
2503 W. 16th STREET
SEDALIA, MO 65301

PROJECT # F1901-01
SITE # 1501
ASSET # 3511501140

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 08/22/2019

CAD DWG FILE: F1901-01-1501-C-101
DRAWN BY: JWM
CHECKED BY: HTR
DESIGNED BY: JWM/HTR

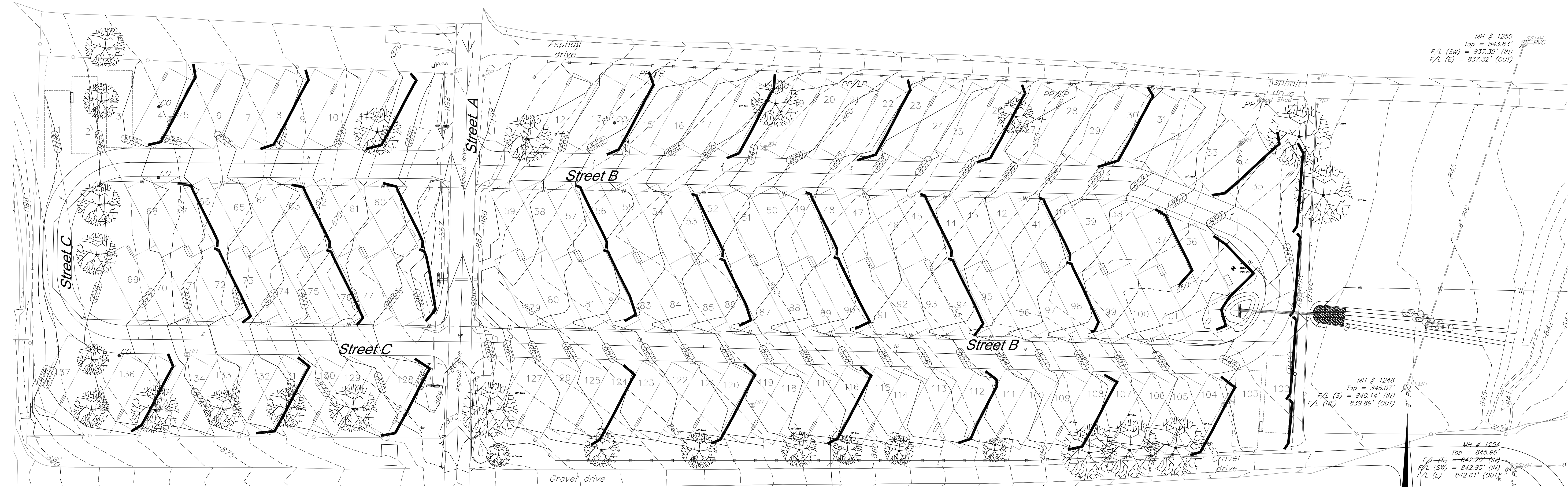
SHEET TITLE:

Campground
Demolition
Plan

SHEET NUMBER:

C-101

SHEET 03 OF 14
08/22/2019



General Construction Notes:

1. All construction shall conform to the State of Missouri specifications in effect on the approval date shown on these plans and incorporated herein by reference. All construction shall conform to these plans and notes. If a conflict between plans and specifications shall arise, the State specifications shall overrule unless otherwise directed by the Project Engineer.
2. Existing Site Conditions – The Contractor shall, prior to commencing work, investigate surface and subsurface conditions to be encountered across the project site and notify the Engineer if any discrepancies or changed conditions are noted.
3. The Contractor shall coordinate the removal and relocation of any existing utility services (i.e. electric, water, sanitary, etc.) with the owners representative responsible for construction coordination. Any planned disruption in service to the existing site shall require 72 hours prior notice of disruption of service. Contractor shall remove all wiring, piping and fixtures for such identified utility services noted for removal or relocation.
4. Project Coordination – There will be numerous construction activities occurring at this site including storm sewer, sanitary sewer, grading, water and other utility work. The General Contractor shall be responsible for coordinating his work with His sub-contractors and also other contractors that may be working on or near the site.
5. Traffic Control – The Contractor shall be responsible for any necessary temporary traffic control during construction. Temporary traffic control shall conform to Chapter 6C, "Temporary Traffic Control Elements" of the Manual on Uniform Traffic Control Devices (MUTCD). All traffic signage, barricades, drum, pavement markings, and other traffic control devices shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices.
6. Demolition – All demolition shall be per these drawings and shall adhere to all local, state and federal laws, ordinances, codes, and statutes governing such demolition.
7. All trash and debris identified on site shall be properly handled and disposed of in accordance with state of Missouri regulations.
8. All work shall be confined within easements and/or construction limits as shown on the plans.
9. Construction Staking – Construction staking shall be the responsibility of the General Contractor.
10. All site concrete shall be KCMMB-4K – 4,000 PSI unless otherwise noted. The contractor or his concrete supplier shall, at the contractor's expense, submit a concrete mix design for annual approval by the Kansas City Metro Materials Board (KCMMB) prior to placement of concrete. Additional information regarding KCMMB approved concrete mix designs is available at www.kcmmb.org.
11. The contractor is responsible for the protection of all property corners and section corners. Any property corners and/or section corners disturbed or damaged by construction activities shall be reset by a Registered Land Surveyor licensed in the State of Missouri, at the contractor's expense.
12. The contractor shall be responsible for the restoration of the right-of-way and for damaged improvement such as curbs, driveways, sidewalks, streetlights and traffic signal junction boxes, traffic signal loop lead ins, signal poles, irrigation systems, etc. Damaged improvements shall be repaired in conformance with the latest City or State standards and to the City or State's satisfaction.
13. Linear foot measurements shown on the plans are horizontal measurements, not slope measurements. Pipe measurements shown are taken from center of structure to center of structure.
14. Saw-cuts shall be made to full depth or as otherwise shown on these plans.
15. Accessible parking stalls shall be signed with City/ADA approved sign and constructed in strict accordance with City/ADA standards and shall not exceed 2.00% slope in any direction. All sidewalks shall be handicap accessible with a maximum cross slope of 2.00% and a maximum longitudinal slope of 5.00%.

Permitting:

16. Permits – The Contractor is responsible for obtaining all required permits, paying all fees, and for otherwise complying with all applicable regulations governing the work. Contractor is responsible for procuring all necessary permits prior to the commencement of any construction.

Erosion Control:

17. Site Drainage – Drainage across the project site during construction is the Contractors' responsibility. Surface drainage shall be controlled to reduce or prevent the flow of surface water onto adjacent grounds. Contractor shall control downstream erosion and silting during construction. Flexibility is given to the Contractor to make minor grading revisions around site to improve drainage during construction, with prior approval from the Engineer.
18. The contractor is responsible for providing erosion and sediment control BMPs to prevent sediment from reaching paved areas, storm sewer systems, drainage courses and adjacent properties. In the event the prevention measures are not effective, the contractor shall remove any debris, silt, or mud and restore the right-of-way, or adjacent properties to original or better condition.
19. Contractor shall submit an erosion control plan for approval.
20. The contractor shall sod all disturbed areas within the public street right-of-way unless otherwise noted on the plans or if specific written approval is granted by the City.
21. No trees shall be damaged or removed without the prior consent of the owner, unless as otherwise shown on plan.

Earthwork:

22. Soils Report – A soils report has been completed by Terracon, (Project No. 02195009, dated April 24, 2019), a copy of which is included in the project manual. ALL grading operations shall conform to the findings and recommendations noted within the referenced soils report. George Butler Associates, Inc. is not responsible for the adequacy or accuracy of the geotechnical information shown or provided, it is provided for informational purposes only.

23. Clearing and Grubbing – This contractor shall be responsible for removing and disposing of grass and vegetation that may be found on the site at this time. Contractor shall strip site of all organic material to a depth acceptable to the Geotechnical Engineer and prior to the placement of any fill. Disposal of all debris shall be performed by the contractor in strict accordance with all local codes and ordinances. All debris resulting from this work shall be completely removed from the site by the contractor. All clearing and grubbing, stripping and grading operations shall be performed in accordance with the recommendations as found in the geotechnical report, erosion control plans/SWPPP and grading plans prepared for this site.
24. Cut/Fill – All fills are to be made with suitable structural fill material in accordance with the Geotechnical Engineer's recommendations.
25. Slopes – Slopes shall be graded at a maximum slope of 3:1 (Horz./Vert.). It is critical that grading shown in and around RV pads be accomplished accurately so drainage away from the pads is maintained as shown.
26. All Temporary Slopes and Excavations should conform to Occupational Safety and Health Administration (OSHA) Standards for the Construction Industry (Code of Federal Regulations, Title 29 Labor – Part 1926, Subpart P Excavations).
27. Unless otherwise noted, all spot grades and contours shown on these plans are to "finish" grade surface. Contractor shall adjust for overcut in the parking, landscape and other areas as further defined in the geotechnical report, these plans or the project specifications.
28. Topsoil Placement – All disturbed lawn and landscape areas shall have topsoil placed to the final lines and grades shown on the plans. There shall be 10" minimum depth of topsoil in landscape areas and 6" minimum depth of topsoil in lawn areas. In no event shall the final grade of topsoil placed be higher than the lines and grades shown on these plans.

Utility:

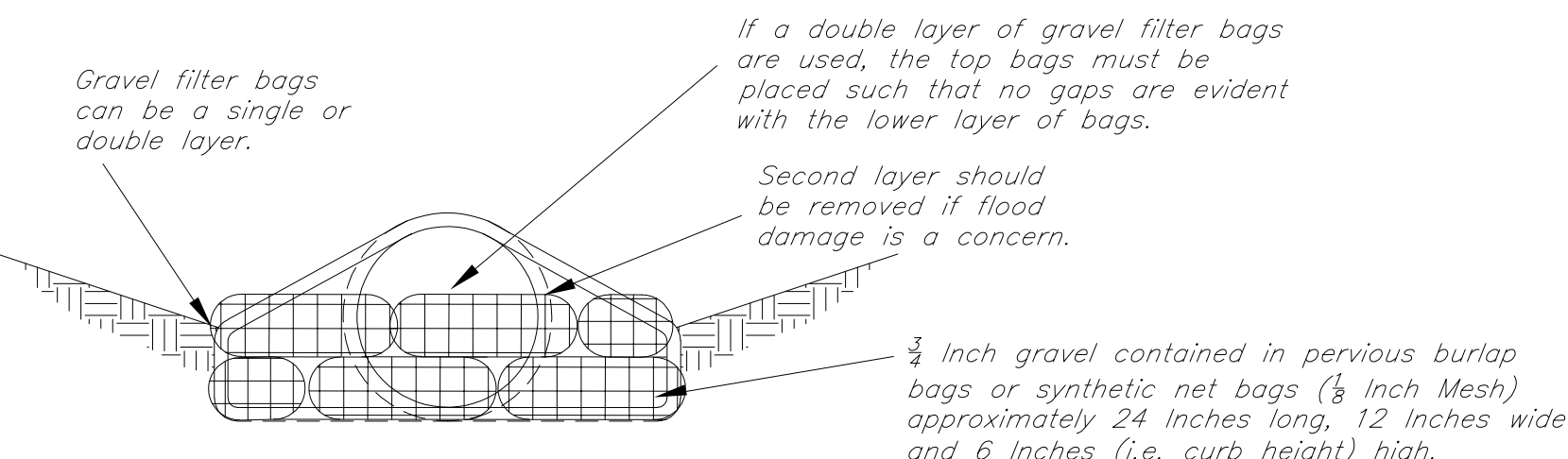
29. All manholes, catch basins, utility valves, meter pits and other utility equipment shall be adjusted or rebuilt to grade as required.
30. Prior to commencement of work, the Contractor shall notify all utility companies who have facilities in the vicinity of the project area of the work to be performed.
31. All utility extensions and construction shall conform to the Standards and Specifications of the applicable utility companies.
32. No open cutting of public streets will be allowed without permit or approval from the City of Sedalia.

Storm Sewer:

33. Prior to ordering precast structures: Shop drawings shall be submitted to the design engineer for approval.
34. All RCP (Reinforced Concrete Pipe) shall be Class III unless otherwise noted in plans.
35. All HDPE (High-Density Polyethylene) Pipe shall be ADS N-12 WT 18 (Water Tight, Bell and Spigot) or approved equal. 4" through 10" Pipe shall meet AASHTO M252, Type S (Smooth Interior, Corrugated Exterior) or SP (Perforated) and 12" through 60" Pipe shall meet AASHTO M294, Type S (Smooth Interior, Corrugated Exterior).
36. Pipe measurements shown are taken from center of structure to center of structure.

Seeding Notes:

1. Contractor shall uniformly spread the topsoil over disturbed area. Seed and straw mulch shall be placed as soon as practicable.
2. Between November 1 and March 15, temporary stabilization shall include a straw mulch cover at 2.25 tons/acre.
3. Between March 15 and May 31, drill or hydroseed all disturbed areas with K-31 fescue at 90 lbs PLS per acre and rye grass at 50 lbs PLS per acre. Reapply straw mulch cover at 1.5 tons per acre.
4. Immediately water after seeding and continue to water as necessary to establish permanent vegetation.



Inlet Protection - Gravel Bag Detail

Not to Scale

Benchmarks

State Plane, NAD83
2402 – Missouri Central, U.S. Feet
Vertical – NAVD88, U.S. Feet

CP# 103 = 1/2" IB w/ GBA control cap on the North side of gravel drive

- R1.) S 16.00' to North edge of gravel drive
- R2.) SW 48.20' to magnail & shiner in North face of power pole
- R3.) W 160.10' to centerline of asphalt drive leading to Gate 5 exit

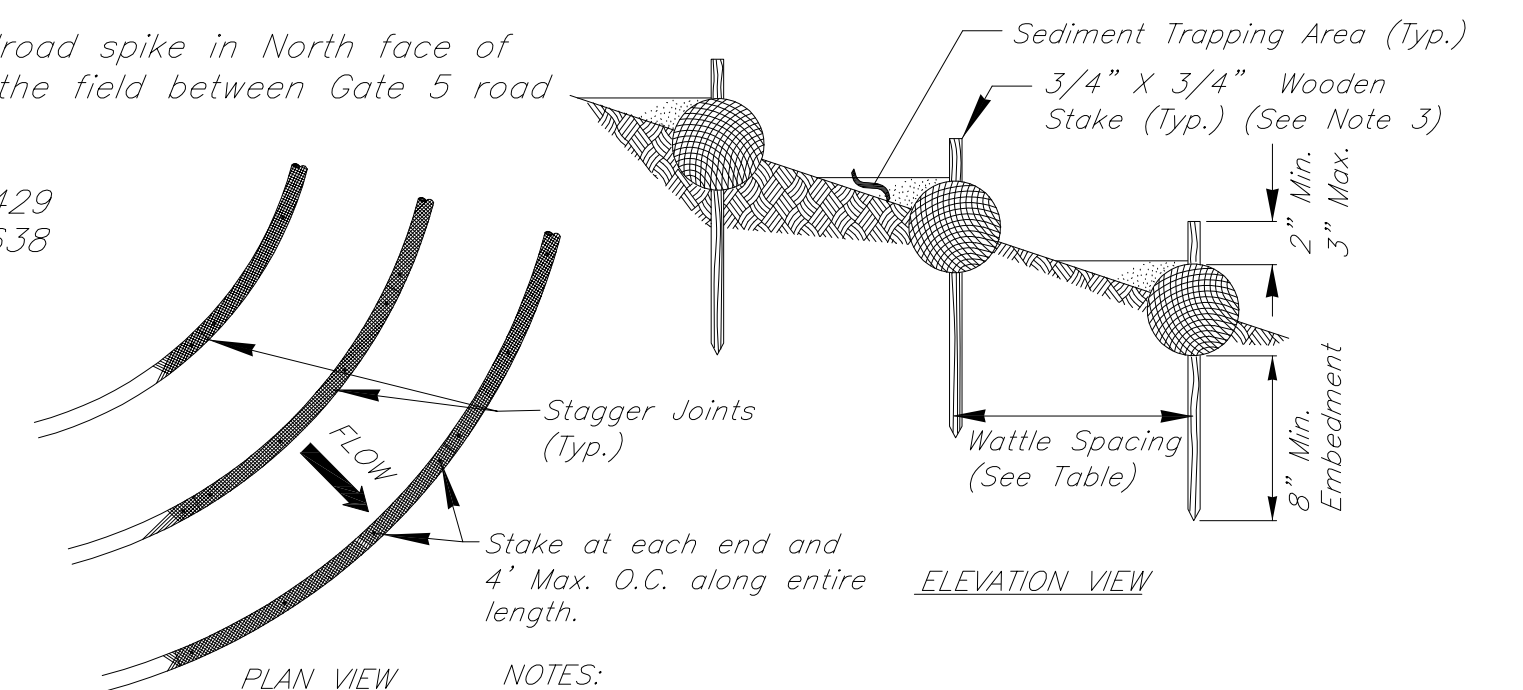
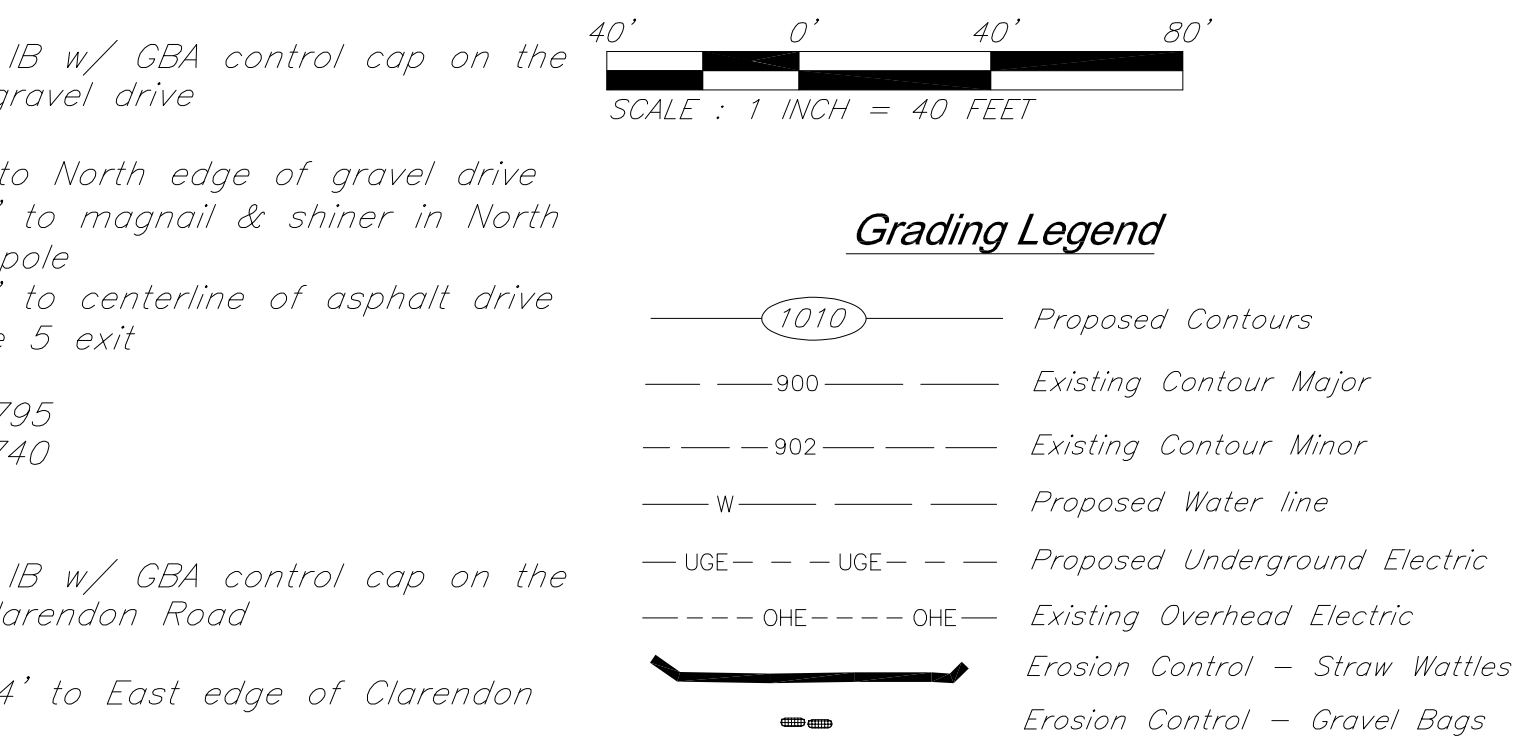
N– 1043722.0795
E– 1422705.7740
EL– 865.11

CP# 104 = 1/2" IB w/ GBA control cap on the East side of Clarendon Road

- R1.) WSW 15.64' to East edge of Clarendon Drive
 - R2.) SE 40.17' to corner fence post
 - R3.) E 33.98' to fence
- N– 1043721.8184
E– 1422179.5742
EL– 877.72

BM# 11 = Railroad spike in North face of power pole in the field between Gate 5 road & Gate 4 road

N– 1043533.7429
E– 1423140.3638
EL– 850.42



WATTLE SPACING TABLE	
SLOPE	MAXIMUM SPACING
1:1	10 FEET
2:1	20 FEET
3:1	30 FEET
4:1	40 FEET

Straw Wattle Detail

Not to Scale

STATE OF MISSOURI
MICHAEL L. PARSON,
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NEW CAMPGROUND

MISSOURI STATE
FAIRGROUNDS

2503 W. 16th STREET
SEDALIA, MO 65301

PROJECT # F1901-01
SITE # 1501
ASSET # 3511501140

REVISION: _____
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DATE: _____
ISSUE DATE: 08/22/2019

CAD DWG FILE: F1901-01-1501-C-102
DRAWN BY: JWM
CHECKED BY: HTR
DESIGNED BY: JWM/HTR

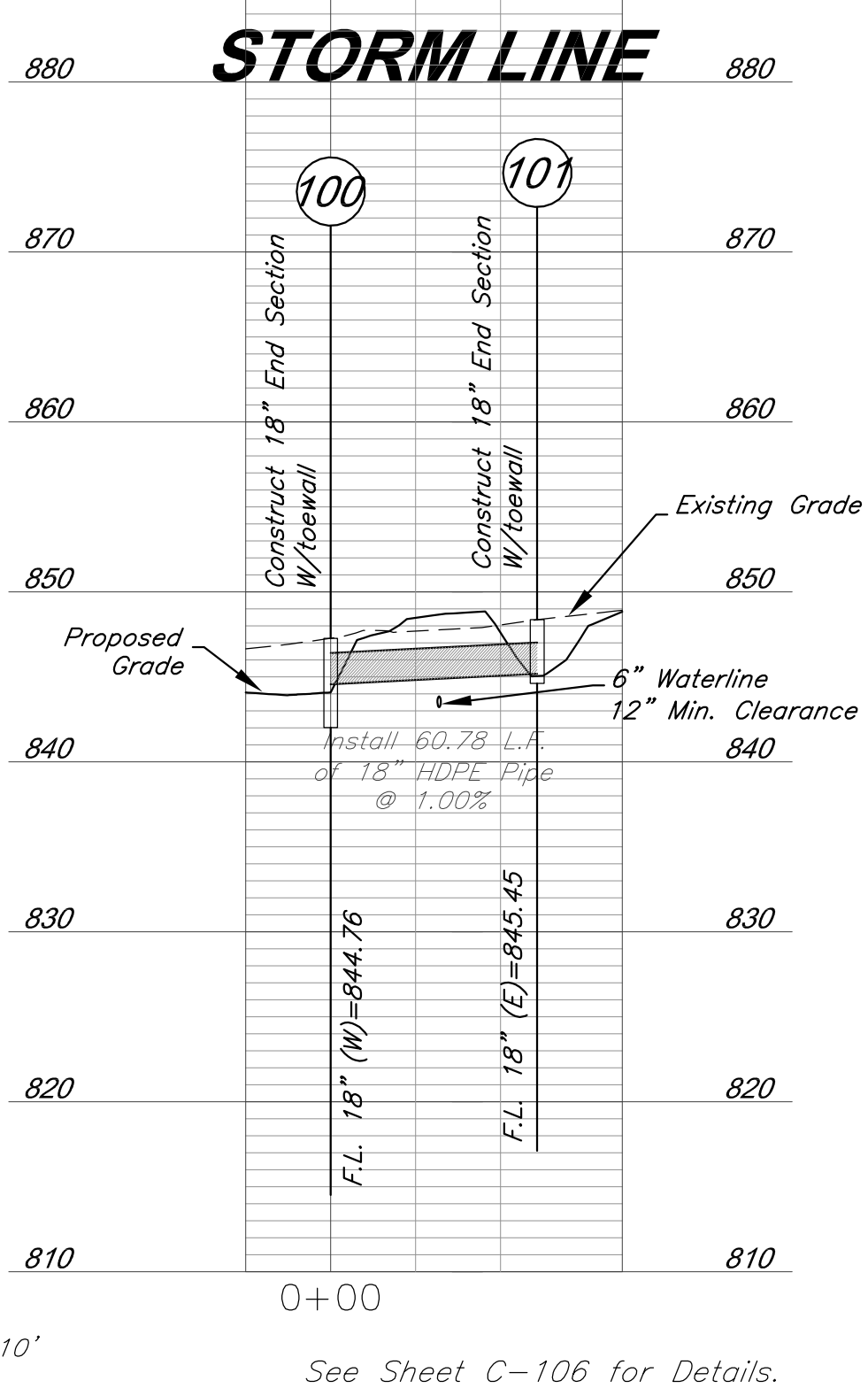
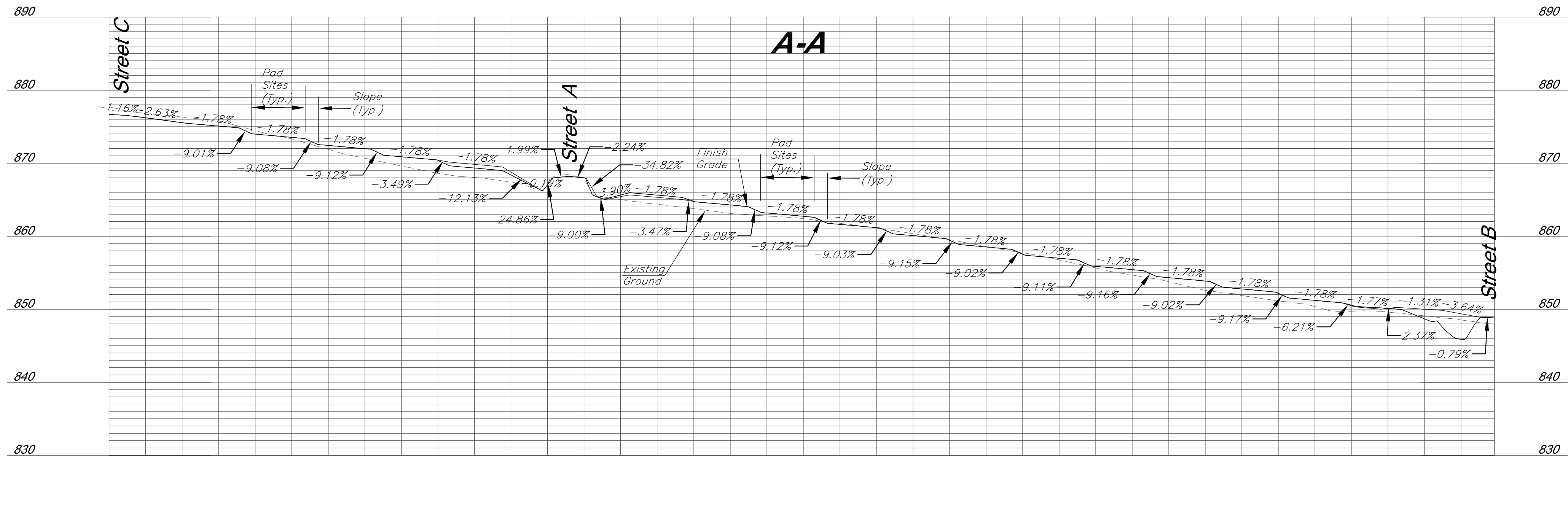
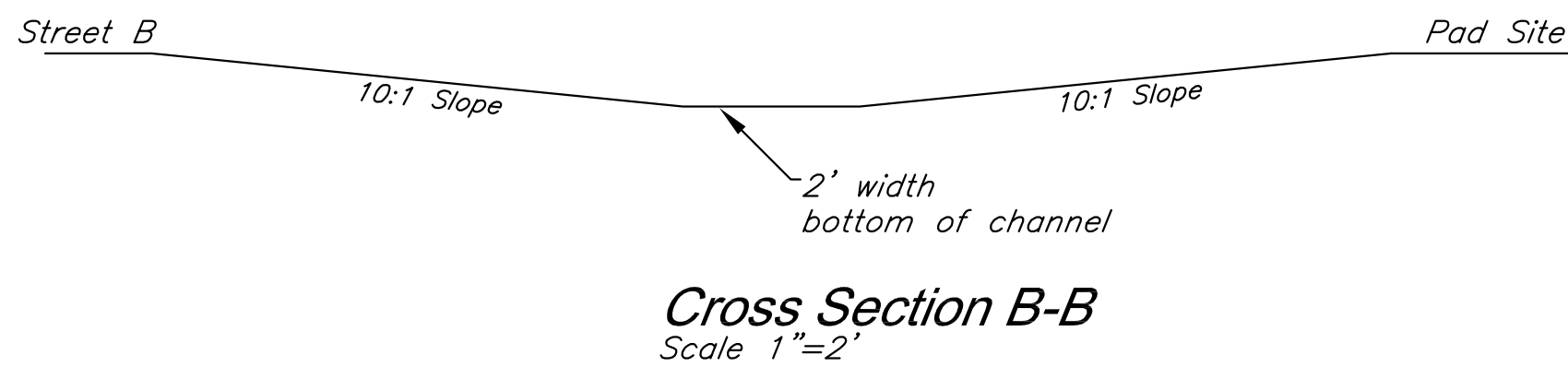
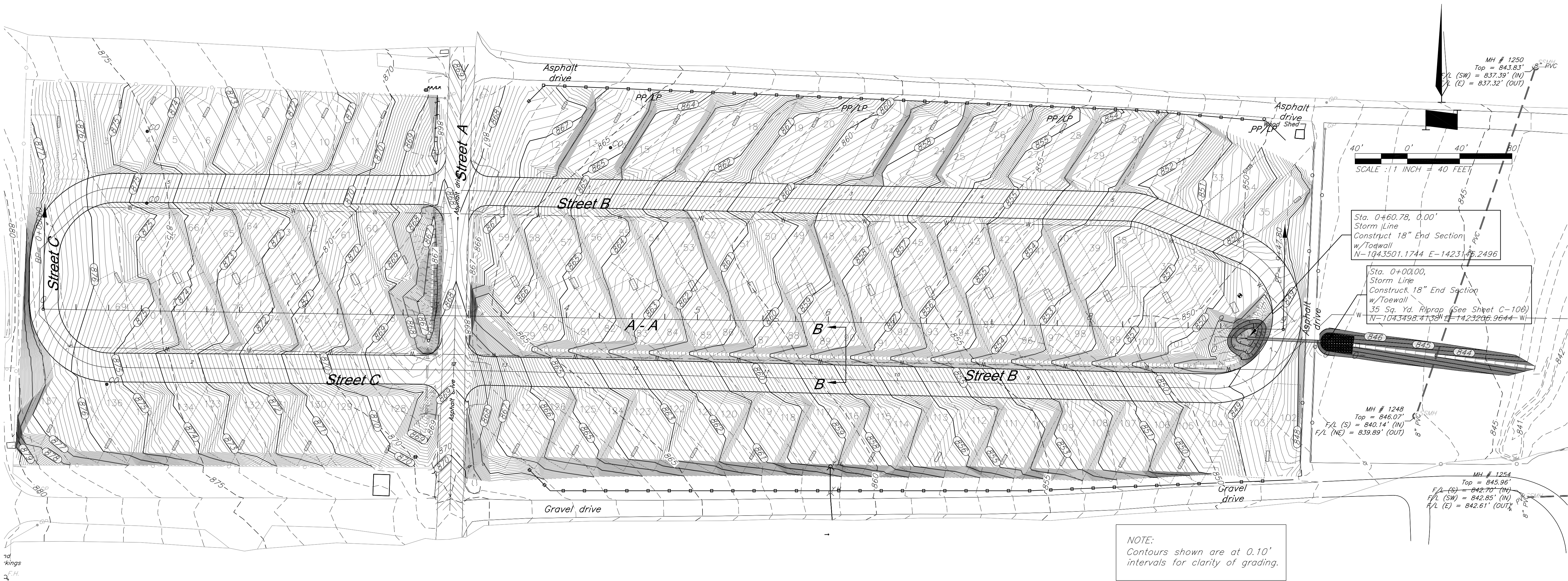
SHEET TITLE:

Campground
Grading & Erosion
Control Plan

SHEET NUMBER:

C-102

SHEET 04 OF 14
08/22/2019



STATE OF MISSOURI
MICHAEL L. PARSON,
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DATE: _____
ISSUE DATE: 08/22/2019

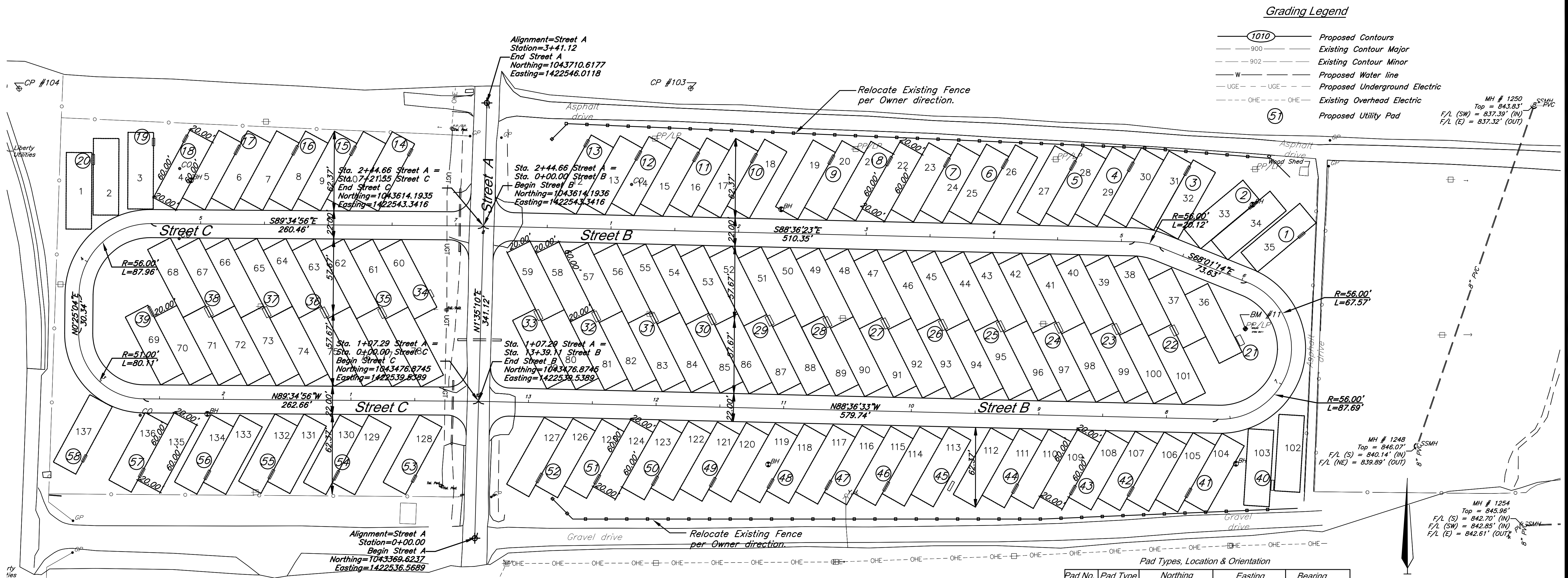
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SHEET TITLE:
Campground
Grading
Plan

SHEET NUMBER:

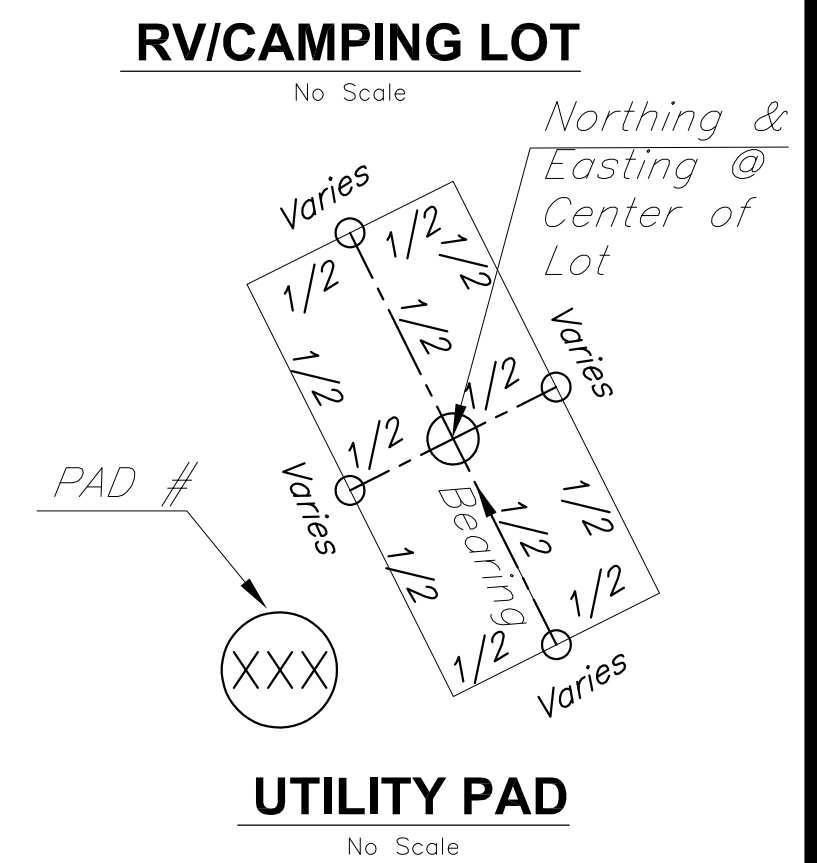
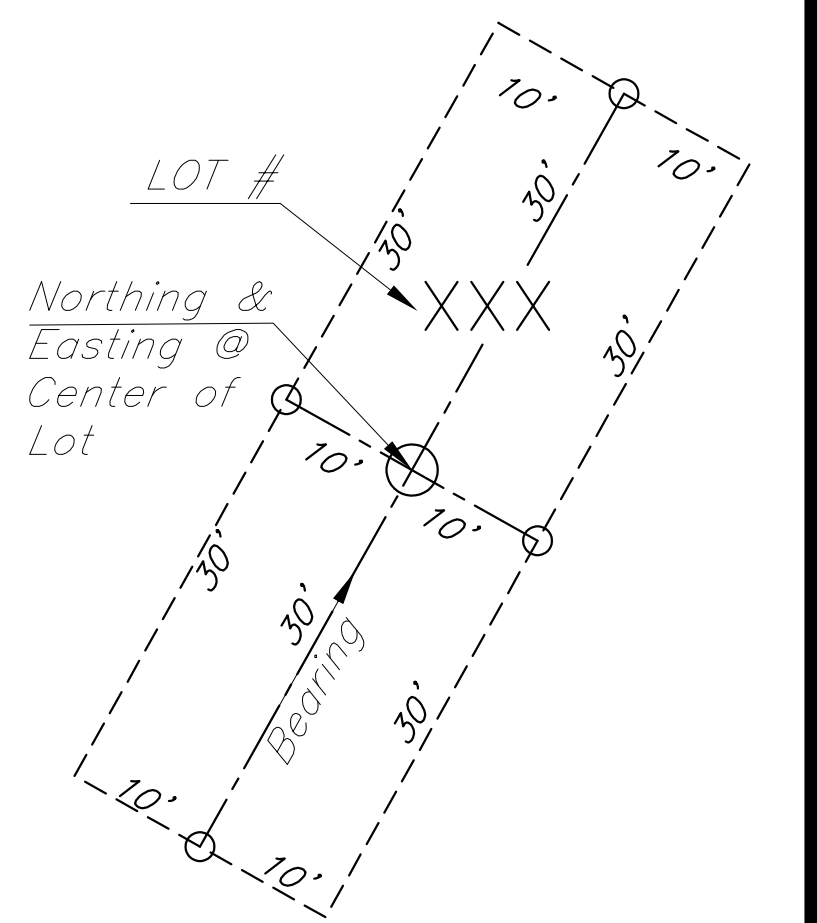
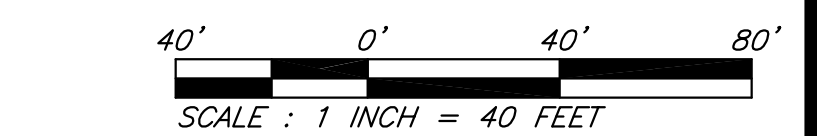
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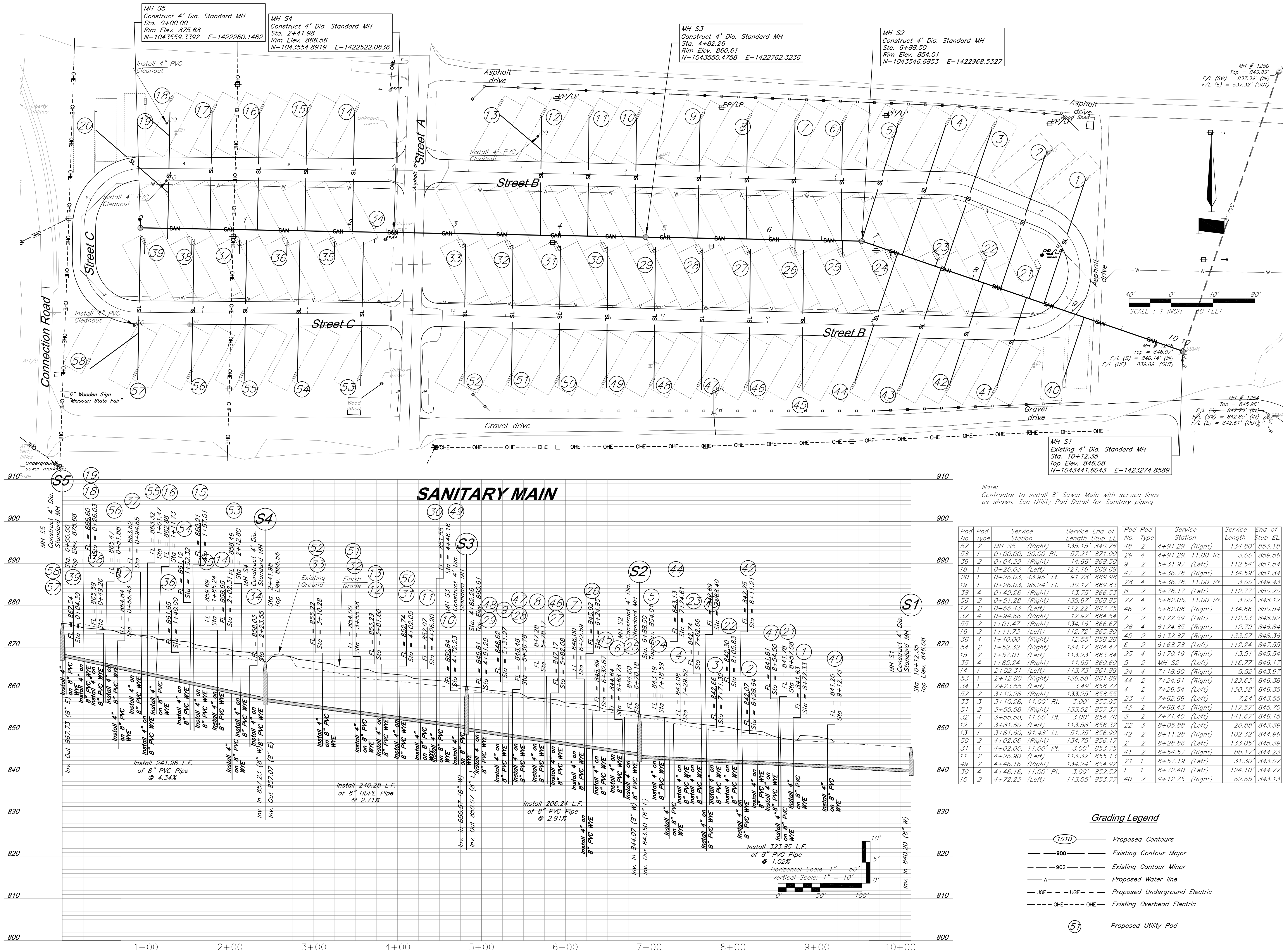
SHEET 05 OF 14
08/22/2019



Camping Lot, Location & Orientation				Camping Lot, Location & Orientation				Camping Lot, Location & Orientation				Camping Lot, Location & Orientation			
Lot No.	Northing	Easting	Bearing	Lot No.	Northing	Easting	Bearing	Lot No.	Northing	Easting	Bearing	Lot No.	Northing	Easting	Bearing
1	N-1,043,641.776	E-1,422,226.410	N0° 16' 13"E	40	N-1,043,560.533	E-1,423,014.528	N26° 36' 25"W	79	N-1,043,517.900	E-1,422,588.521	N26° 36' 25"W	118	N-1,043,427.987	E-1,422,788.598	S29° 23' 34"W
2	N-1,043,652.770	E-1,422,247.647	N0° 16' 13"E	41	N-1,043,561.084	E-1,422,991.883	N26° 36' 25"W	80	N-1,043,517.349	E-1,422,611.166	N26° 36' 25"W	119	N-1,043,428.537	E-1,422,765.953	S29° 23' 34"W
3	N-1,043,657.543	E-1,422,274.768	N0° 16' 13"E	42	N-1,043,561.635	E-1,422,969.238	N26° 36' 25"W	81	N-1,043,516.799	E-1,422,633.810	N26° 36' 25"W	120	N-1,043,429.088	E-1,422,743.308	S29° 23' 34"W
4	N-1,043,658.095	E-1,422,307.914	N28° 25' 04"E	43	N-1,043,562.185	E-1,422,946.594	N26° 36' 25"W	82	N-1,043,516.248	E-1,422,656.155	N26° 36' 25"W	121	N-1,043,429.639	E-1,422,720.663	S29° 23' 34"W
5	N-1,043,657.930	E-1,422,330.550	N28° 25' 04"E	44	N-1,043,562.736	E-1,422,923.949	N26° 36' 25"W	83	N-1,043,515.697	E-1,422,679.400	N26° 36' 25"W	122	N-1,043,430.189	E-1,422,698.034	S29° 23' 34"W
6	N-1,043,657.764	E-1,422,353.201	N28° 25' 04"E	45	N-1,043,563.275	E-1,422,901.310	N26° 36' 25"W	84	N-1,043,515.147	E-1,422,701.729	N26° 36' 25"W	123	N-1,043,430.740	E-1,422,675.389	S29° 23' 34"W
7	N-1,043,657.559	E-1,422,375.852	N28° 25' 04"E	46	N-1,043,563.387	E-1,422,878.659	N26° 36' 25"W	85	N-1,043,514.596	E-1,422,724.074	N26° 36' 25"W	124	N-1,043,431.290	E-1,422,652.745	S29° 23' 34"W
8	N-1,043,657.434	E-1,422,398.502	N28° 25' 04"E	47	N-1,043,564.388	E-1,422,856.015	N26° 36' 25"W	86	N-1,043,514.046	E-1,422,747.019	N26° 36' 25"W	125	N-1,043,431.840	E-1,422,630.100	S29° 23' 34"W
9	N-1,043,657.269	E-1,422,421.138	N28° 25' 04"E	48	N-1,043,564.939	E-1,422,833.370	N26° 36' 25"W	87	N-1,043,513.495	E-1,422,769.663	N26° 36' 25"W	126	N-1,043,432.392	E-1,422,607.455	S29° 23' 34"W
10	N-1,043,657.104	E-1,422,443.789	N28° 25' 04"E	49	N-1,043,565.489	E-1,422,811.725	N26° 36' 25"W	88	N-1,043,512.967	E-1,422,792.297	N26° 36' 25"W	127	N-1,043,433.177	E-1,422,584.942	S29° 23' 34"W
11	N-1,043,656.939	E-1,422,466.440	N28° 25' 04"E	50	N-1,043,566.040	E-1,422,788.081	N26° 36' 25"W	89	N-1,043,512.394	E-1,422,814.953	N26° 36' 25"W	128	N-1,043,435.068	E-1,422,487.797	S28° 25' 04"W
12	N-1,043,654.461	E-1,422,621.824	N29° 23' 35"E	51	N-1,043,566.602	E-1,422,765.430	N26° 36' 25"W	90	N-1,043,511.843	E-1,422,837.597	N26° 36' 25"W	129	N-1,043,434.785	E-1,422,448.032	S28° 25' 04"W
13	N-1,043,653.973	E-1,422,644.489	N29° 23' 35"E	52	N-1,043,567.141	E-1,422,742.791	N26° 36' 25"W	91	N-1,043,511.293	E-1,422,860.242	N26° 36' 25"W	130	N-1,043,434.950	E-1,422,425.381	S28° 25' 04"W
14	N-1,043,653.356	E-1,422,667.089	N29° 23' 35"E	53	N-1,043,567.692	E-1,422,720.147	N26° 36' 25"W	92	N-1,043,510.742	E-1,422,882.887	N26° 36' 25"W	131	N-1,043,435.728	E-1,422,397.209	S28° 25' 04"W
15	N-1,043,652.809	E-1,422,689.743	N29° 23' 35"E	54	N-1,043,568.242	E-1,422,697.502	N26° 36' 25"W	93	N-1,043,510.191	E-1,422,905.532	N26° 36' 25"W	132	N-1,043,435.893	E-1,422,374.559	S28° 25' 04"W
16	N-1,043,652.257	E-1,422,712.378	N29° 23' 35"E	55	N-1,043,568.793	E-1,422,674.857	N26° 36' 25"W	94	N-1,043,509.629	E-1,422,928.182	N26° 36' 25"W	133	N-1,043,435.139	E-1,422,347.000	S28° 25' 04"W
17	N-1,043,651.706	E-1,422,735.038	N29° 23' 35"E	56	N-1,043,569.347	E-1,422,652.212	N26° 36' 25"W	95	N-1,043,509.090	E-1,422,950.821	N26° 36' 25"W	134	N-1,043,435.304	E-1,422,324.350	S28° 25' 04"W
18	N-1,043,651.157	E-1,422,757.683	N29° 23' 35"E	57	N-1,043,569.894	E-1,422,629.583	N26° 36' 25"W	96	N-1,043,508.539	E-1,422,973.466	N26° 36' 25"W	135	N-1,043,436.695	E-1,422,295.565	S28° 25' 04"W
19	N-1,043,650.583	E-1,422,779.668	N29° 23' 35"E	58	N-1,043,570.445	E-1,422,606.938	N26° 36' 25"W	97	N-1,043,507.989	E-1,422,996.110	N26° 36' 25"W	136	N-1,043,436.860	E-1,422,272.914	S28° 25' 04"W
20	N-1,043,650.033	E-1,422,818.313	N29° 23' 35"E	59	N-1,043,570.995	E-1,422,584.293	N26° 36' 25"W	98	N-1,043,507.438	E-1,423,018.755	N26° 36' 25"W	137	N-1,043,450.947	E-1,422,229.423	S28° 25' 04"W
21	N-1,043,649.484	E-1,422,840.958	N29° 23' 35"E	60	N-1,043,572.441	E-1,422,484.171	S27° 34' 56"E	99	N-1,043,506.887	E-1,423,041.400	N26° 36' 25"W	Pad Types, Location & Orientation			
22	N-1,043,648.934	E-1,422,863.602	N29° 23' 35"E	61	N-1,043,572.606	E-1,422,461.520	S27° 34' 56"E	100	N-1,043,506.337	E-1,423,064.029	N26° 36' 25"W	Pad No.	Pad Type	Northing	Easting
23	N-1,043,648.406	E-1,422,886.259	N29° 23' 35"E	62	N-1,043,572.771	E-1,422,438.884	S27° 34' 56"E	101	N-1,043,505.786	E-1,423,086.674	N26° 36' 25"W	(1)	Type I	N-1,043,607.061	E-1,423,184.316
24	N-1,043,647.835	E-1,422,908.892	N29° 23' 35"E	63	N-1,043,572.936	E-1,422,416.233	S27° 34' 56"E	102	N-1,043,436.137	E-1,423,174.768	N3° 30' 27"E	(2)	Type II	N-1,043,630.566	E-1,423,146.380
25	N-1,043,647.285	E-1,422,931.337	N29° 23' 35"E	64	N-1,043,573.101	E-1,422,393.583	S27° 34' 56"E	103	N-1,043,424.824	E-1,423,150.801	N3° 30' 27"E	(3)	Type II	N-1,043,657.528	E-1,423,094.751
26	N-1,043,646.735	E-1,422,954.181	N29° 23' 35"E	65	N-1,043,573.267	E-1,422,370.932	S27° 34' 56"E	104	N-1,043,420.682	E-1,423,115.994	S29° 23' 34"W	(4)	Type II	N-1,043,660.591	E-1,423,050.513
27	N-1,043,646.122	E-1,422,984.993	N29° 23' 35"E	66	N-1,043,573.432	E-1,422,348.281	S27° 34' 56"E	105	N-1,043,421.233	E-1,423,093.350	S29° 23' 34"W	(5)	Type II	N-1,043,661.690	E-1,423,005.239
28	N-1,043,645.572	E-1,423,007.622	N29° 23' 35"E	67	N-1,043,573.597	E-1,422,325.630	S27° 34' 56"E	106	N-1,043,421.784	E-1,423,078.705	S29° 23' 34"W	(6)	Type II	N-1,043,662.853	E-1,422,951.782
29	N-1,043,645.023	E-1,423,030.267	N29° 23' 35"E	68	N-1,043,573.762	E-1,422,302.979	S27° 34' 56"E	107	N-1,043,422.334	E-1,423,048.075	S29° 23' 34"W	(7)	Type II	N-1,043,663.975	E-1,422,906.505
30	N-1,043,644.473	E-1,423,052.912	N29° 23' 35"E	69	N-1,043,520.912	E-1,422,285.459	S27° 34' 56"E	108	N-1,043,422.884	E-1,423,025.431	S29° 23' 34"W	(8)	Type II	N-1,043,665.052	E-1,422,861.203
31	N-1,043,641.960	E-1,423,074.505	N29° 23' 35"E	70	N-1,043,520.746	E-1,422,308.110	S27° 34' 56"E	109	N-1,043,423.435	E-1,423,002.786	S29° 23' 34"W	(9)	Type II	N-1,043,666.151	E-1,422,815.914
32	N-1,043,634.920	E-1,423,093.494	N29° 23' 35"E	71	N-1,043,520.581	E-1,422,330.761	S27° 34' 56"E	110	N-1,043,423.986	E-1,422,980.141	S29° 23' 34"W	(10)	Type II	N-1,043,667.275	E-1,422,755.284
33	N-1,043,623.230	E-1,423,121.830	N50° 07' 11"E	72	N-1,043,520.416	E-1,422,353.411	S27° 34' 56"E	111	N-1,043,424.536	E-1,422,957.497	S29° 23' 34"W	(11)	Type II	N-1,043,668.381	E-1,422,709.983
34	N-1,043,614.579	E-1,423,143.012	N50° 07' 11"E	73	N-1,043,520.251	E-1,422,376.062	S27° 34' 56"E	112	N-1,043,425.087	E-1,422,934.852	S29° 23' 34"W	(12)	Type II	N-1,043,669.480	E-1,422,664.693
35	N-1,043,605.085	E-1,423,166.355	N50° 07' 11"E	74	N-1,043,520.086	E-1,422,398.713	S27° 34' 56"E	113	N-1,043,425.234	E-1,422,901.821	S29° 23' 34"W	(13)	Type I	N-1,043,678.973	E-1,422,624.160
36	N-1,043,537.854	E-1,423,115.349	N26° 36' 25"W	75	N-1,043,519.921	E-1,422,421.364	S27° 34' 56"E	114	N-1,043,425.784	E-1,422,879.176	S29° 23' 34"W	(14)	Type I	N-1,043,671.968	E-1,422,485.942
37	N-1,043,549.857	E-1,423,086.967	N26° 36' 25"W	76	N-1,043,519.755	E-1,422,444.105	S27° 34' 56"E	115	N-1,043,426.335	E-1,422,856.532	S29° 23' 34"W	(15)	Type II	N-1,043,673.178	E-1,422,441.117
38	N-1,043,559.432	E-1,423,059.802	N26° 36' 25"W	77	N-1,043,519.590	E-1,422,466.665	S27° 34' 56"E	116	N-1,043,426.885	E-1,422,833.887	S29° 23' 34"W	(16)	Type II	N-1,043,673.509	E-1,422,395.830
39	N-1,043,559.983	E-1,423,037.157	N26° 36' 25"W	78	N-1,043,519.425	E-1,422,489.301	S27° 34' 56"E	117	N-1,043,427.414	E-1,422,811.230	S29° 23' 34"W				

Pad Types, Location & Orientation				
Pad No.	Pad Type	Northing	Easting	Bearing
(17)	Type II	N-1,043,673.839	E-1,422,350.529	N28° 25' 04"E
(18)	Type I	N-1,043,682.642	E-1,422,309.827	N28° 25' 04"E
(19)	Type I	N-1,043,679.996	E-1,422,284.874	N0° 16' 13"E
(20)	Type II	N-1,043,666.383	E-1,422,237.722	N0° 16' 13"E
(21)	Type I	N-1,043,524.579	E-1,423,136.197	N26° 36' 25"W
(22)	Type III	N-1,043,532.331	E-1,423,084.562	N26° 36' 25"W
(23)	Type IV	N-1,043,533.432	E-1,423,039.288	N26° 36' 25"W
(24)	Type IV	N-1,043,534.533	E-1,422,993.998	N26° 36' 25"W
(25)	Type IV	N-1,043,535.635	E-1,422,948.709	N26° 36' 25"W
(26)	Type IV	N-1,043,536.739	E-1,422,903.418	N26° 36' 25"W
(27)	Type IV	N-1,043,537.837	E-1,422,858.130	N26° 36' 25"W
(28)	Type IV	N-1,043,538.939	E-1,422,812.840	N26° 36' 25"W
(29)	Type IV	N-1,043,540.054	E-1,422,767.544	N26° 36' 25"W
(30)	Type IV	N-1,043,541.141	E-1,422,722.262	N26° 36' 25"W
(31)	Type IV	N-1,043,542.242	E-1,422,676.987	N26° 36' 25"W
(32)	Type IV	N-1,043,543.343	E-1,422,631.698	N26° 36' 25"W
(33)	Type III	N-1,043,544.445	E-1,422,586.409	N26° 36' 25"W
(34)	Type I	N-1,043,561.392	E-1,422,502.353	S27° 34' 56"E
(35)	Type IV	N-1,043,546.098	E-1,422,464.093	S27° 34' 56"E
(36)	Type IV	N-1,043,546.428	E-1,422,418.806	S27° 34' 56"E
(37)	Type IV	N-1,043,546.759	E-1,422,373.505	S27° 34' 56"E
(38)	Type IV	N-1,043,547.089	E-1,422,328.203	S27° 34' 56"E
(39)	Type II	N-1,043,547.416	E-1,422,282.895	S27° 34' 56"E
(40)	Type II	N-1,043,411.079	E-1,423,161.557	N3° 30' 27"E
(41)	Type II	N-1,043,405.115	E-1,423,095.748	S29° 23' 34"W
(42)	Type II	N-1,043,406.216	E-1,423,050.458	S29° 23' 34"W
(43)	Type II	N-1,043,407.317	E-1,423,005.184	S29° 23' 34"W
(44)	Type II	N-1,043,408.418	E-1,422,959.895	S29° 23' 34"W
(45)	Type II	N-1,043,410.483	E-1,422,909.691	S29° 23' 34"W
(46)	Type II	N-1,043,410.217	E-1,422,858.930	S29° 23' 34"W
(47)	Type II	N-1,043,411.318	E-1,422,813.640	S29° 23' 34"W
(48)	Type II	N-1,043,412.419	E-1,422,768.351	S29° 23' 34"W
(49)	Type II	N-1,043,413.521	E-1,422,723.061	S29° 23' 34"W
(50)	Type II	N-1,043,414.622	E-1,422,677.787	S29° 23' 34"W
(51)	Type II	N-1,043,415.723	E-1,422,632.498	S29° 23' 34"W
(52)	Type II	N-1,043,416.824	E-1,422,587.208	S29° 23' 34"W
(53)	Type I	N-1,043,416.237	E-1,422,488.978	S28° 25' 04"W
(54)	Type II	N-1,043,418.876	E-1,422,428.053	S28° 25' 04"W
(55)	Type II	N-1,043,419.819	E-1,422,377.231	S28° 25' 04"W
(56)	Type II	N-1,043,419.230	E-1,422,327.022	S28° 25' 04"W
(57)	Type II	N-1,043,420.786	E-1,422,275.566	S28° 25' 04"W
(58)	Type I	N-1,043,432.116	E-1,422,230.604	S28° 25' 04"W





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SEDALIA, MO 65301

PROJECT # F1901-01
SITE # 1501
ASSET # 3511501140

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DATE: _____
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ISSUE DATE: 08/22/2019

CAD DWG FILE: F1901-01-1501-C-105
DRAWN BY: JWM
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DESIGNED BY: JWM/HTR

SHEET TITLE:
Campground
Sanitary
Plan

SHEET NUMBER:
C-105
SHEET 07 OF 14
08/22/2019



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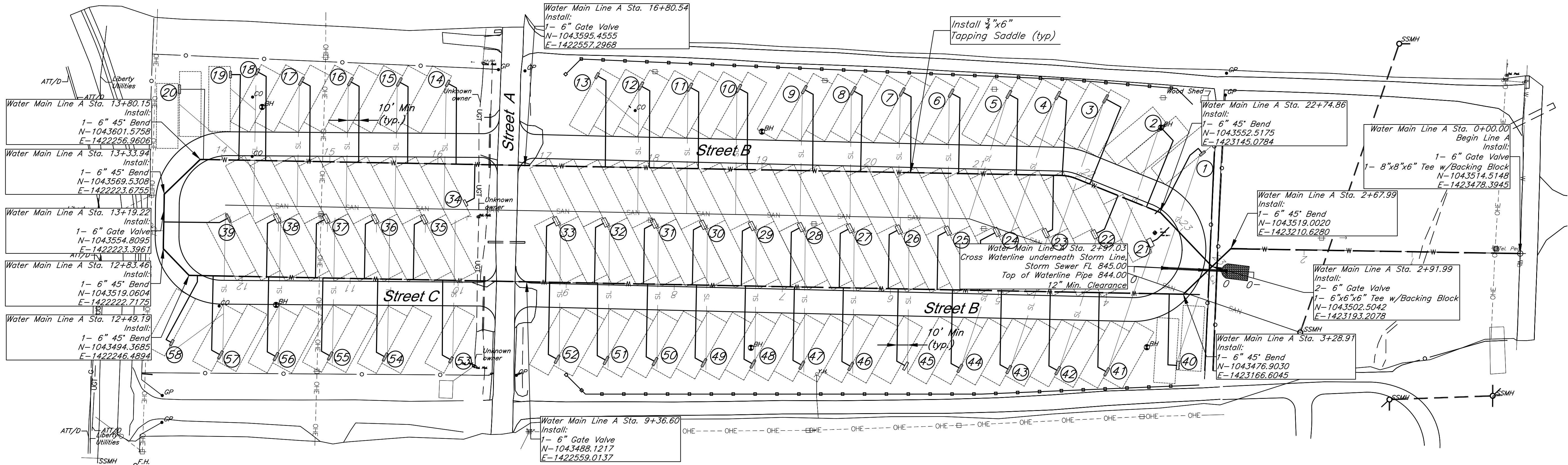
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DRAWN BY: JWM
CHECKED BY: HTR
DESIGNED BY: JWM/HTR

SHEET TITLE:
**Campground
Water Line Plan**

SHEET NUMBER:

C-106

SHEET 08 OF 14
08/22/2019



Water Connection Stubs

Pad Number	Stub Length	Spigots	Pad Number	Stub Length	Spigots	Pad Number	Stub Length	Spigots
①	78 LF	1	⑳	20 LF	1	④①	73 LF	2
②	81 LF	2	㉑	42 LF	3	④②	76 LF	2
③	92 LF	2	㉒	55 LF	4	④③	76 LF	2
④	78 LF	2	㉓	59 LF	4	④④	76 LF	2
⑤	78 LF	2	㉔	59 LF	4	④⑤	76 LF	2
⑥	78 LF	2	㉕	59 LF	4	④⑥	76 LF	2
⑦	78 LF	2	㉖	59 LF	4	④⑦	76 LF	2
⑧	78 LF	2	㉗	59 LF	4	④⑧	76 LF	2
⑨	78 LF	2	㉘	59 LF	4	④⑨	76 LF	2
⑩	78 LF	2	㉙	59 LF	4	④⑩	76 LF	2
⑪	78 LF	2	㉚	59 LF	4	④⑪	76 LF	2
⑫	78 LF	2	㉛	59 LF	3	④⑫	76 LF	2
⑬	88 LF	1	㉜	59 LF	1	④⑬	76 LF	2
⑭	78 LF	1	㉝	40 LF	4	④⑭	78 LF	1
⑮	78 LF	2	㉞	59 LF	4	④⑮	76 LF	2
⑯	78 LF	2	㉟	59 LF	4	④⑯	77 LF	2
⑰	78 LF	2	㊱	59 LF	4	④⑰	76 LF	2
⑱	86 LF	1	㊲	59 LF	2	④⑱	75 LF	2
㉑	87 LF	1	㊳	42 LF		④㉑	71 LF	1
㉒	87 LF	1						

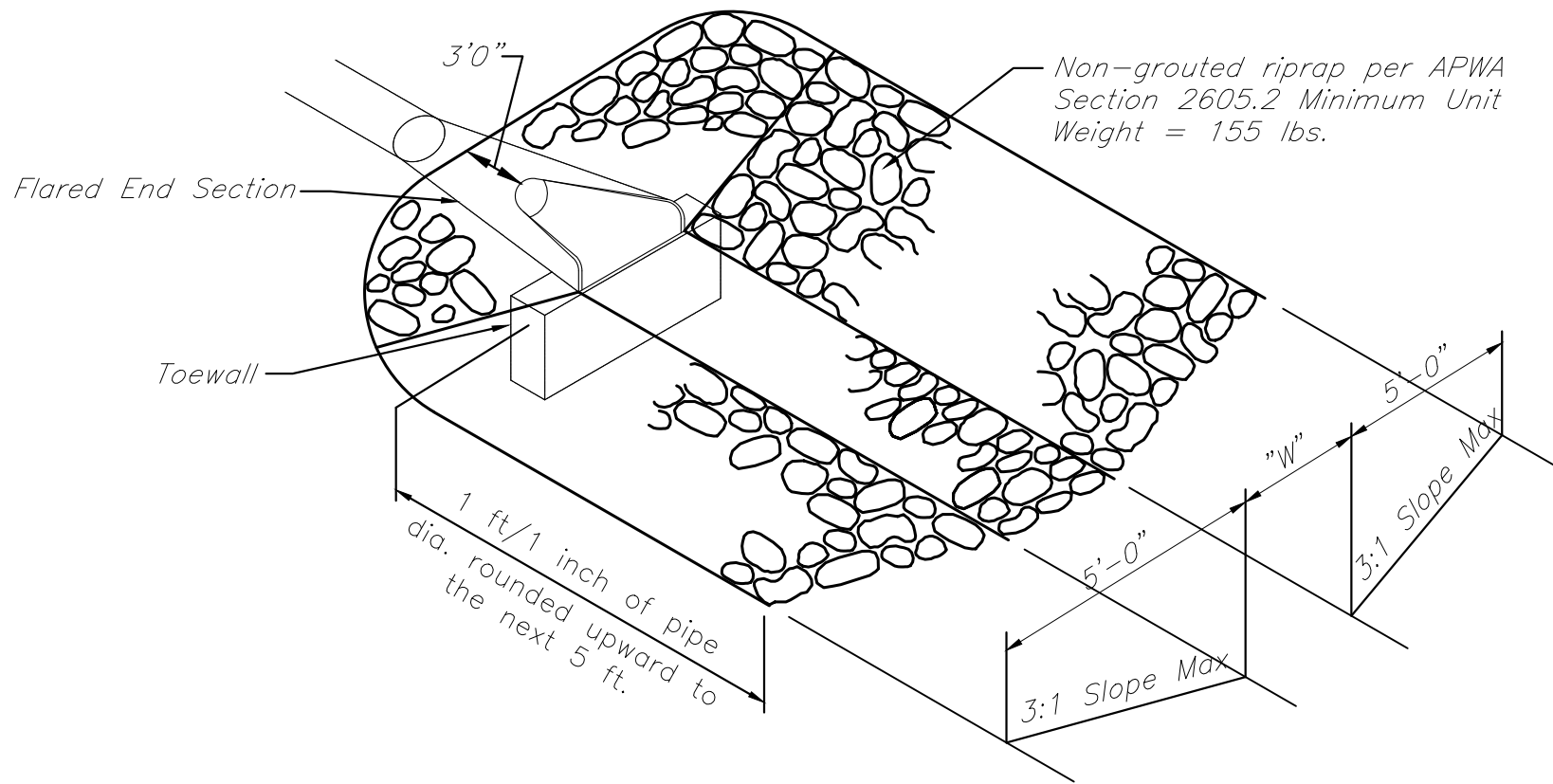
Notes:

- Distribution main shall be 6" PVC C900. Service lines to each pad shall be 3/4" Type K Copper.
- All pipes and connection must conform to AWWA Standards.
- Minimum 42" cover from top of grade to top of pipe.
- Pipe shall be restrained joint w/conc thrust blocking provided at all fittings.
- All bends, fittings, thrust blocking, etc. required to complete the water main installation shown, shall be considered subsidiary to water main. Please note additional fittings may be required to accommodate field conditions.

Note: Parallel lines of water and sanitary sewer must have a minimum 10' separation.

Legend

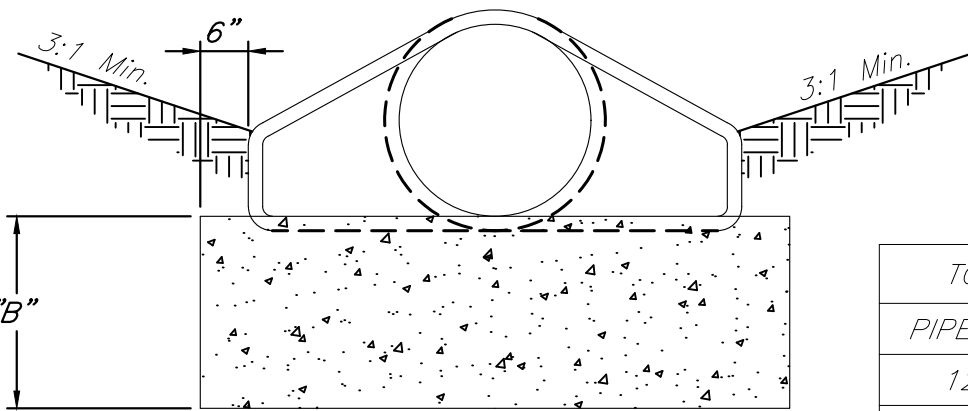
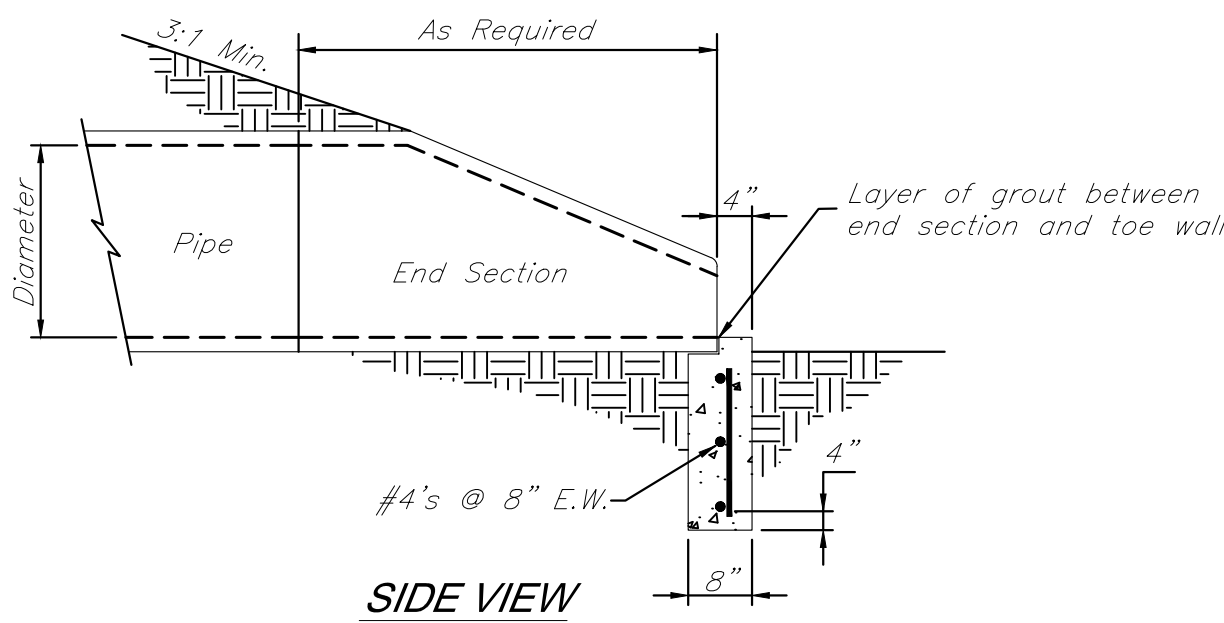
- ⑩10 Proposed Contours
- 900 Existing Contour Major
- 902 Existing Contour Minor
- W Proposed Water line
- UGE Proposed Underground Electric
- OHE Existing Overhead Electric
- ⑤1 Proposed Utility Pad



Outlet Erosion Protection - Rip Rap
Not to Scale

Riprap Notes:

- Water Velocity upon exiting 18" HDPE = 7.0 FT/S.
 - Riprap design conforms with the standards of The KCMO chapter of APWA found in Section 2600.
 - $D50 = \frac{0.02(Q)^{.5}}{T_w(D_p)} = 1.16 \text{ FT}$, rounded to a standard size of 15"
- Where: Q = Discharge (CFS)
 T_w = Tailwater Depth (FT)
 D_p = Pipe Diameter (FT)
D50 = Median Stone Diameter (FT)



TABLE

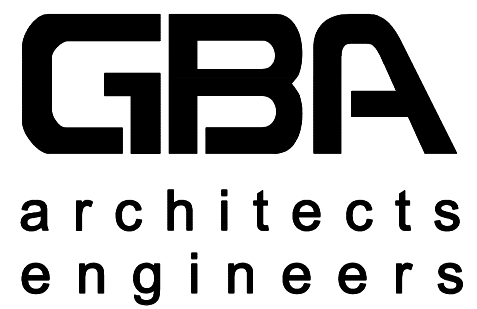
TOE WALL DEPTH	
PIPE DIAMETER	"8"
12" - 21"	18"
24" - 48"	24"
54" - 66"	36"

NOTES:

- The depth of the toe wall shall be per table. If bedrock is encountered a minimum of 12" into bedrock is required.
- All concrete shall be KCMMB-4K.

TOEWALL DETAIL

Not to Scale



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DEPARTMENT OF
AGRICULTURE

NEW CAMPGROUND

MISSOURI STATE
FAIRGROUNDS
2503 W. 16th STREET
SEDALIA, MO 65301

PROJECT # F1901-01
SITE # 1501
ASSET # 3511501140

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 08/22/2019

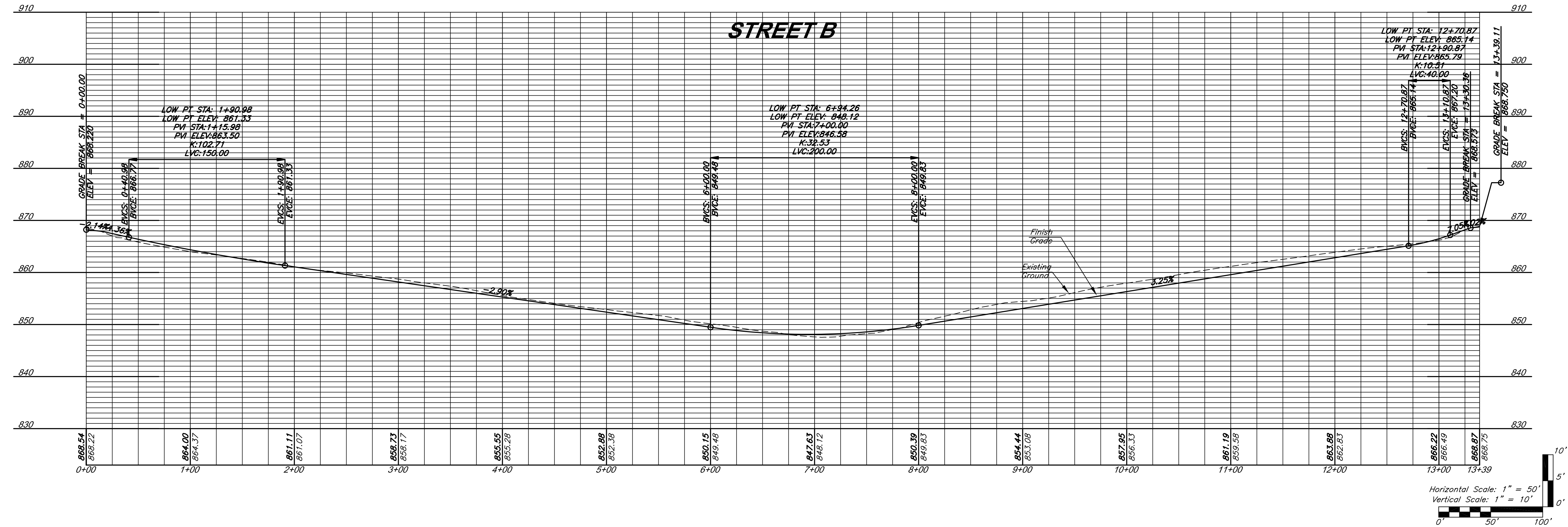
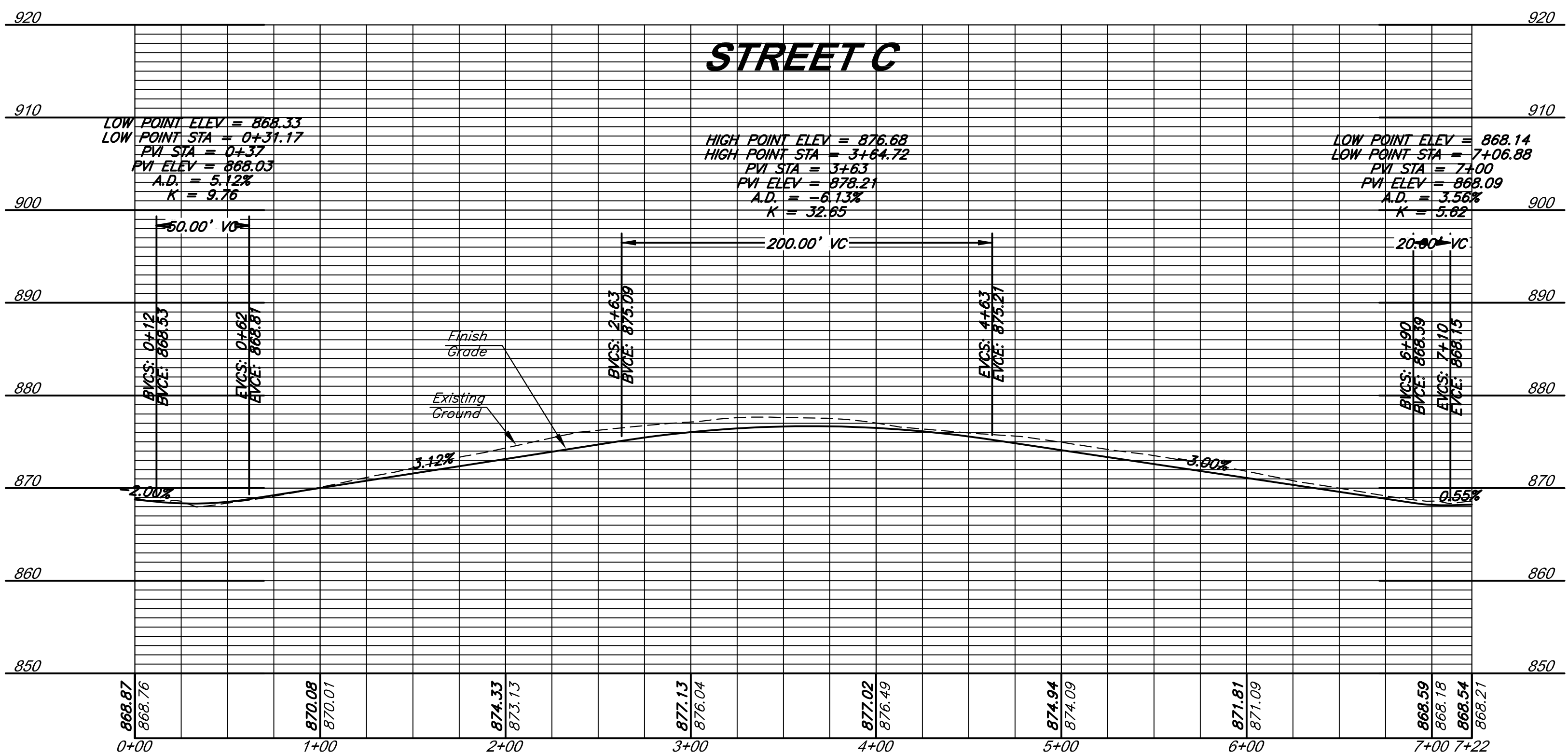
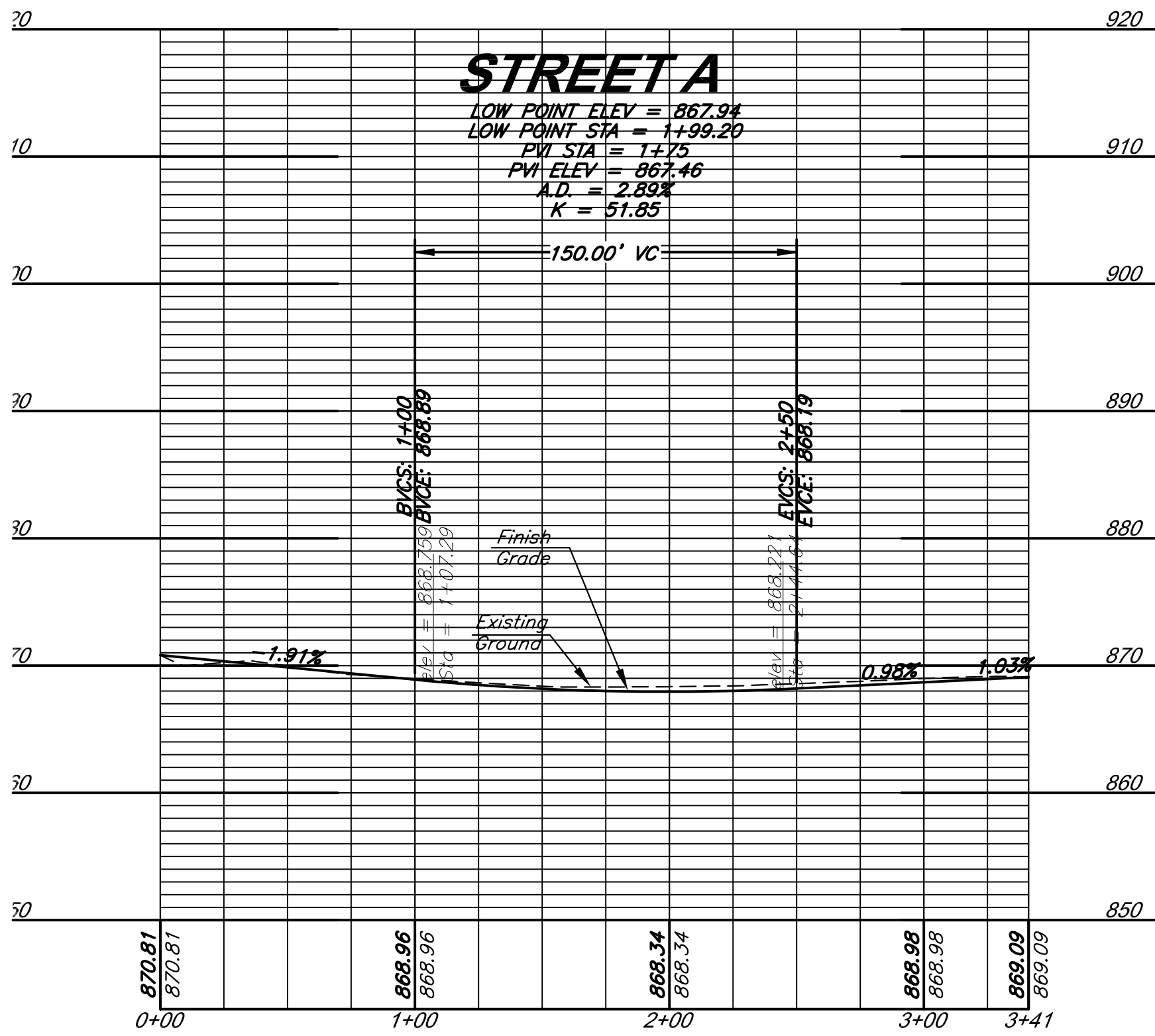
CAD DWG FILE: F1901-01-1501-C-201
DRAWN BY: JWM
CHECKED BY: HTR
DESIGNED BY: JWM/HTR

SHEET TITLE:
Campground
Street
Profiles

SHEET NUMBER:

C-201

SHEET 09 OF 14
08/22/2019





1. All manhole rings shall be set in a minimum of two (2) rows of 3/4 to 1 inch pre-formed butyl joint sealer.
2. All manhole rings to be placed in pavement or in areas to be subsequently paved shall have "Machined Horizontal Bearing Surfaces" and shall comply with Class #25 as established in ASTM A-48.
3. The inside diameter of the manhole shall be 4'-0" for pipe diameters from 8" thru 24" and shall be 5'-0" for pipe diameters from 27" thru 36".
4. All manhole bases (pre-cast or poured-in-place) shall have No. 5 reinforcing bars placed on 6" centers both ways.
5. All standard manhole rings and covers to be Deeter 1315-jcs, Neenah NF-15360009/B (frame) and NF-15360010/B (cover), or approved equal. All manhole rings and covers shown in plans to be "bolt-down" to be Clay & Bailey Manufacturing Co. No. 20140R, Neenah R-1915-F2 or approved equal. An extra payment for furnishing "bolt-down" ring and cover shown in plans will not be made, but shall be considered as subsidiary to the item, "Standard Manhole".
6. Standard manhole steps to be steel core, plastic coated steps (M.A. Ind., Inc. No. PS1- PF, PS2-PF, Deeter No. 1602, Neenah Foundry R-1981-#4 or approved equal).
7. Maximum grade adjustment allowable is 8". Minimum allowable thickness for precast concrete grade adjustment ring is 4".
8. Reinforcement in all precast sections shall equal or exceed A.S.T.M. C-478 specifications.
9. Butyl material to be used at all precast sections joints. O-Rings may be used for joints below the cone section, but the cone section itself shall not have O-ring joints.
10. Riser Rings:

B. New Manholes Laid in Pavement: All new manholes will be provided with riser ring(s) underneath the casting as shown on Drawings. A minimum of one (1) 4-inch riser ring shall be installed on top of the cone section. If a greater depth of adjustment rings is necessary, a combination of 4-inch and 6-inch riser rings may be used up to a maximum of 12 inches of riser rings. If precast concrete riser rings are used, the joints between the cone, riser rings, and casting shall be sealed with a double bead of preformed butyl rubber sealant. If recycled rubber riser rings are used, the joints between the cone, rubber riser rings, and casting shall be sealed with the manufacturer-supplied sealant.

C. Adjustment of an Existing Manhole: If the top of an existing manhole is required to be raised, the combined depth of new riser rings plus the existing riser rings shall not exceed 24 inches. If the required upward adjustment would exceed 24 inches, or if the required downward adjustment is greater than the existing adjustment rings will allow, all vertical adjustments shall be made to the barrel of the manhole.

D. Brick and mortar adjustments will not be allowed

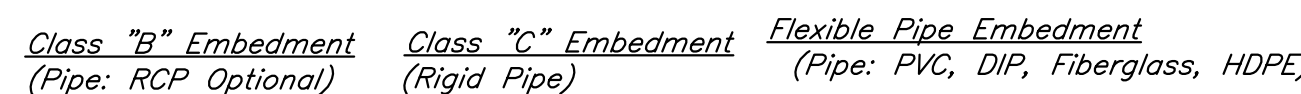





Table of Bedding Depths and Side Clearances				
D	Flexible		Rigid	
	A	B	A	B
4"-27"	6"	9"	9"	16"
> 27"	6"	9"	9"	18"



Hand Placed & Hand Tamped
Select Earth Backfill



Granular Embedment



Concrete

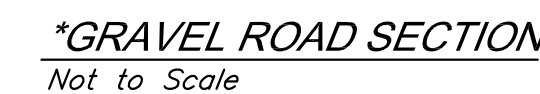
D Nominal Pipe Size
A Fill Below Pipe (See Table)
B Side Clearances (See Table)
P Area Transverse Steel Expressed as % of Area of Concrete at

Notes:

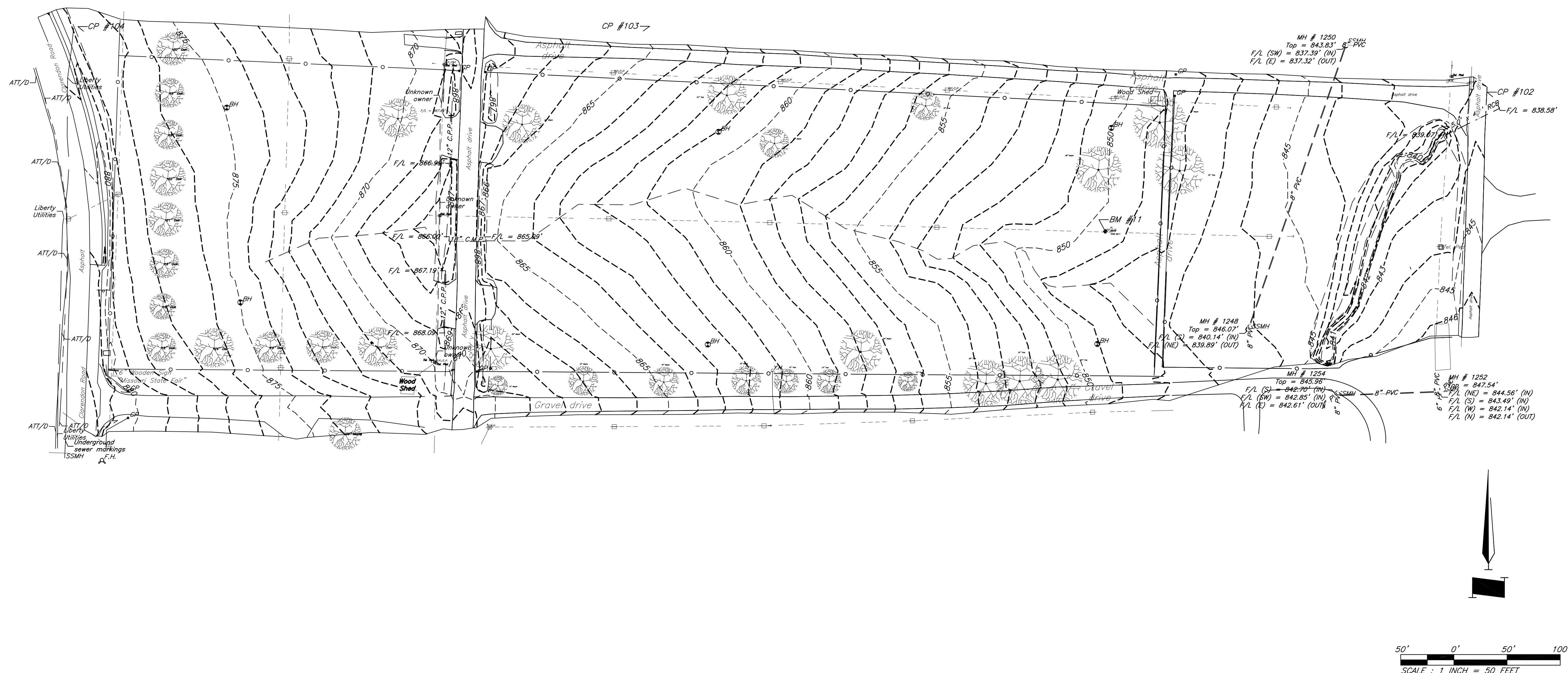
1. *First joint of RCP or VCP pipe shall be embedded in concrete to within 6" of the first joint.*
2. *If flexible or semi-flexible pipe is used, flexible wall connector must be used.*
3. *If a flexible wall connection is used in conjunction with PVC or Ductile Iron pipe, a standard flexible embedment shall be used.*
4. *Flexible wall connections shall be press A-LOK X-CEL, Z-LOK, Press-Seal (PSX Boot-Type Gasket) or approved equal.*

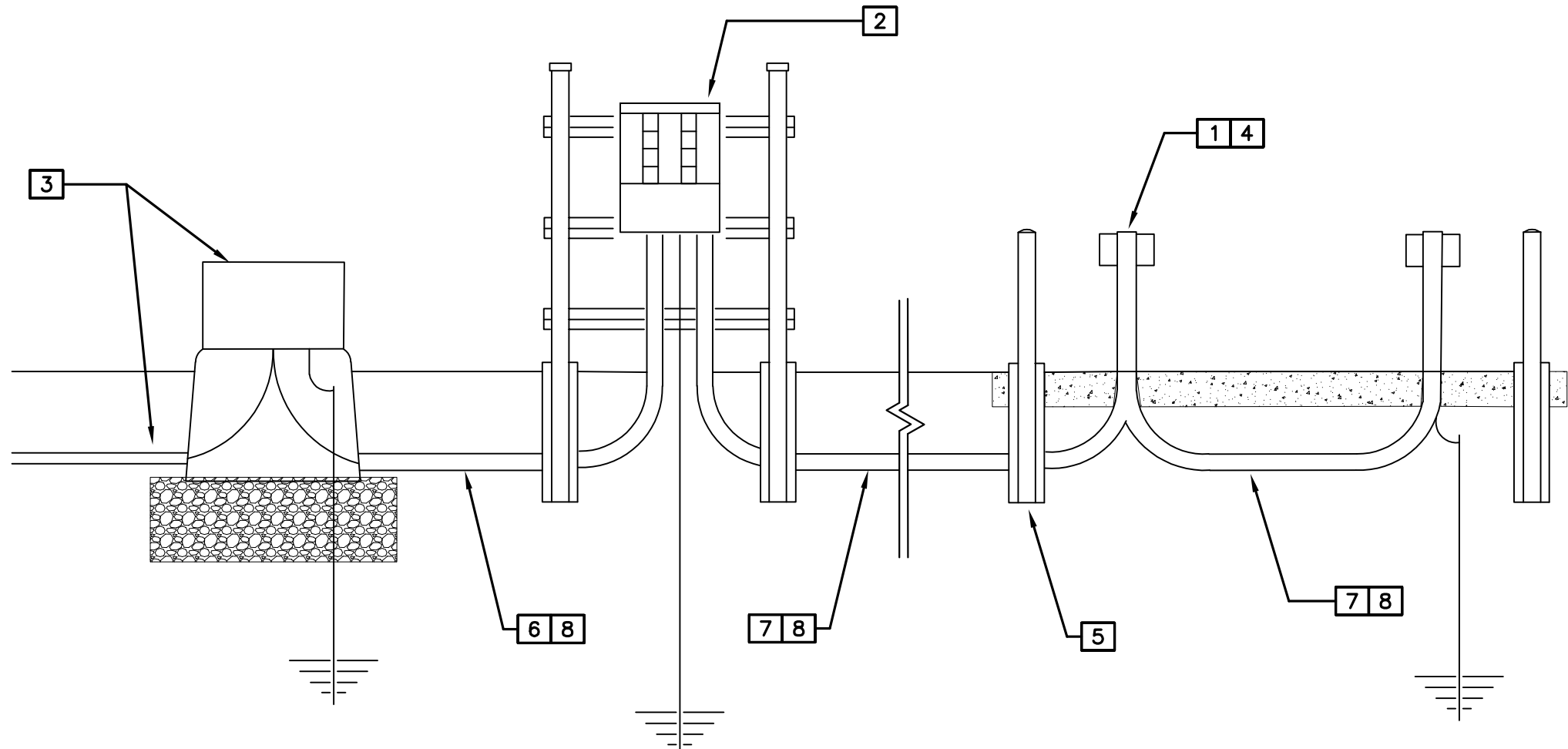


Not to Scale



No Scale





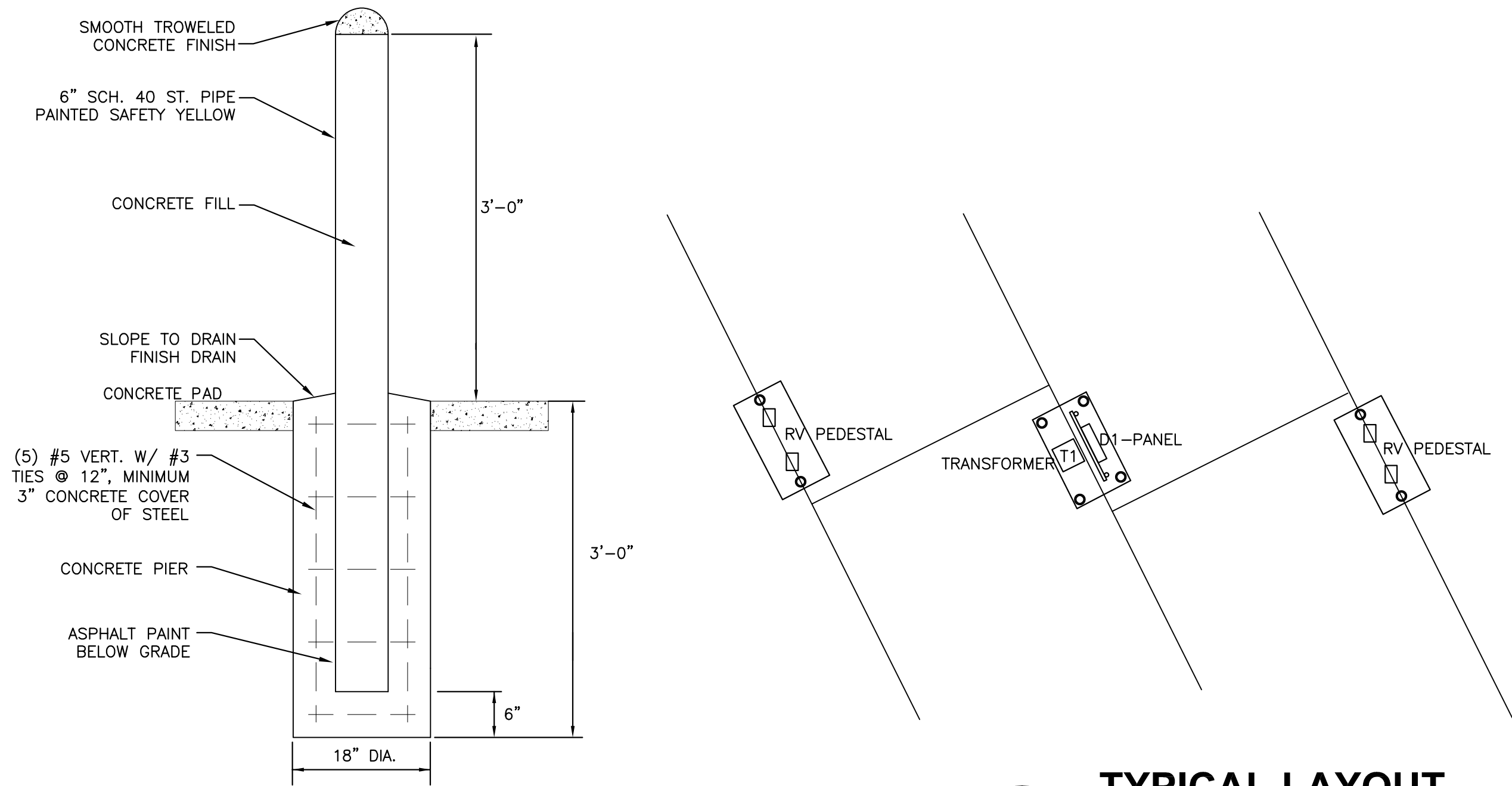
ELECTRICAL RISER DIAGRAM
E-101|E-001 SCALE : NTS

ELECTRICAL RISER DIAGRAM NOTES:

- FURNISH AND INSTALL NEW NEMA-3R 120/240V, 1PH, 100A, 3W DOUBLE HEADED PEDESTAL WITH 20A DUPLEX, GFCI NEMA 5-20, 30A NEMA TT30, 50A NEMA 14-50 RECEPTACLES WITH 20A-1P, 30A-1P, 50A-2P CIRCUIT BREAKERS IN #U5210-XL-75. PEDESTAL. PROVIDE 0.625"x8" GROUND ROD AT EACH END-OF-CIRCUIT PEDESTAL LOCATION AND BOND TO PEDESTAL ENCLOSURE.
- FURNISH AND INSTALL 800A 120/240V NEMA 3R MAIN BREAKER PANELBOARD - REFER TO PANELBOARD SCHEDULES. PROVIDE 10'-0"SCHEDULE 40 GALVANIZED RIGID STEEL CONDUIT WITH PIPE CAP FOR VERTICAL SUPPORTS. PROVIDE CONCRETE BASE IN 3'-0"x10" SONATUBE. PROVIDE 0.625"x8" GROUND ROD AND ROUTE #4 COPPER TO NEUTRAL BUS.
- FURNISH AND INSTALL 167 KVA 7200V DELTA: 120/240V TRANSFORMER. LOOP FEED ON FIBERGLASS BOX PAD. PROVIDE 24" CLEAN GRAVEL BASE BELOW BOX PAD. ROUTE 15KV #2 100%NEUTRAL SHIELD COPPER PRIMARY CABLE BETWEEN TRANSFORMERS AND TO NEW PRIMARY CUTOUT ON POLE OR EXISTING LOOP FEED TRANSFORMER. ROUTE (2) SETS 3#500 KCML USE COPPER IN 4" RIGID STEEL CONDUIT FROM TRANSFORMER BOX TO PANELBOARD MAIN BREAKER.
- LOCATE DOUBLE RV PEDESTALS APPROXIMATELY 5'0" FROM THE CENTER LINE OF THE EXISTING WATER AND SEWER SERVICES IN THE CENTER ROW OF THE CAMPSITE. COORDINATE THE LOCATION OF EACH PEDESTAL WITH FACILITY PERSONNEL BY PLACING FLAGS AT PEDESTAL LOCATIONS FOR OWNER TO REVIEW.
- FURNISH AND INSTALL 6'-0"x0.25"x6" DIA. STEEL BOLLARD IN CONCRETE BASE. FINISH HEIGHT 36" ABOVE GRADE. FILL BOLLARD WITH CONCRETE. LOCATE 36" FROM RV PEDESTAL AND ELECTRICAL RISER. PROVIDE (1) COAT OF METAL PRIMER AND (2) COATS OF ACRYLIC LATEX GLOSS-COLOR PER PROJECT MANAGER.
- FURNISH AND INSTALL (2) SETS OF 500 KCML AND #2/0 CU GROUND CU IN 3" PVC CONDUIT
- FURNISH AND INSTALL 3-#3/0 AND #6 CU GROUND CU IN 2 1/2" CONDUIT
- ALL CONDUITS ABOVE GRADE SHALL BE RIGID METAL CONDUIT. CONDUITS BELOW PANELBOARD SHALL BE RIGID METAL CONDUIT TO A MINIMUM 6" BELOW GRADE.

PAD MOUNT TRANSFORMER NOTES:

- PAD MOUNTED TRANSFORMER ASSEMBLY
- BOX PAD, COMPOSITE POLYMER CONCRETE (BELOW 750 KVA), OR PRECAST CONCRETE (750 KVA AND ABOVE). PRECAST MANHOLE OR VAULT MAY BE SUBSTITUTED FOR BOX PAD.
- SURGE ARRESTOR; DISTRIBUTION CLASS, ELBOW CONNECTED
- TRANSFORMER PRIMARY BUSHING WELL
- LOADBREAK ELBOW CONNECTOR, 200A
- BUSHING INSERT, 200A
- EXTERNALLY OPERATED NO-LOAD TAP CHANGER
- GROUND STRAP
- BAY-O-NET FUSE
- SHIELD STRAP OR CONCENTRIC NEUTRAL GROUND
- GROUND ROD; CU CLAD; 5/8"x10FT
- EXOTHERMIC WELD CONNECTION
- GROUND CONNECTOR
- GROUND WIRE, 4/0 AWG BARE CU, CLASS B STR
- ARRESTER GROUND STRAP (FURNISHED WITH ARRESTER)
- ELBOW PARKING STAND CLIP
- SECONDARY TERMINAL
- SECONDARY TERMINAL - NEUTRAL
- LABEL - CIRCUIT IDENTIFICATION; PLASTIC PANEL WITH 1/2" BLACK ON YELLOW SLIDE-IN NUMBERS
- LABEL - PHASE IDENTIFICATION TAG; A,B,C ON RED, WHITE AND BLUE BACKGROUNDS
- COMPRESSION LUG - 2 HOLE FOR TRANSFORMER FLAG TERMINAL
- GROUNDING LUG



BOLLARD DETAIL
E-101|E-001 SCALE : NTS

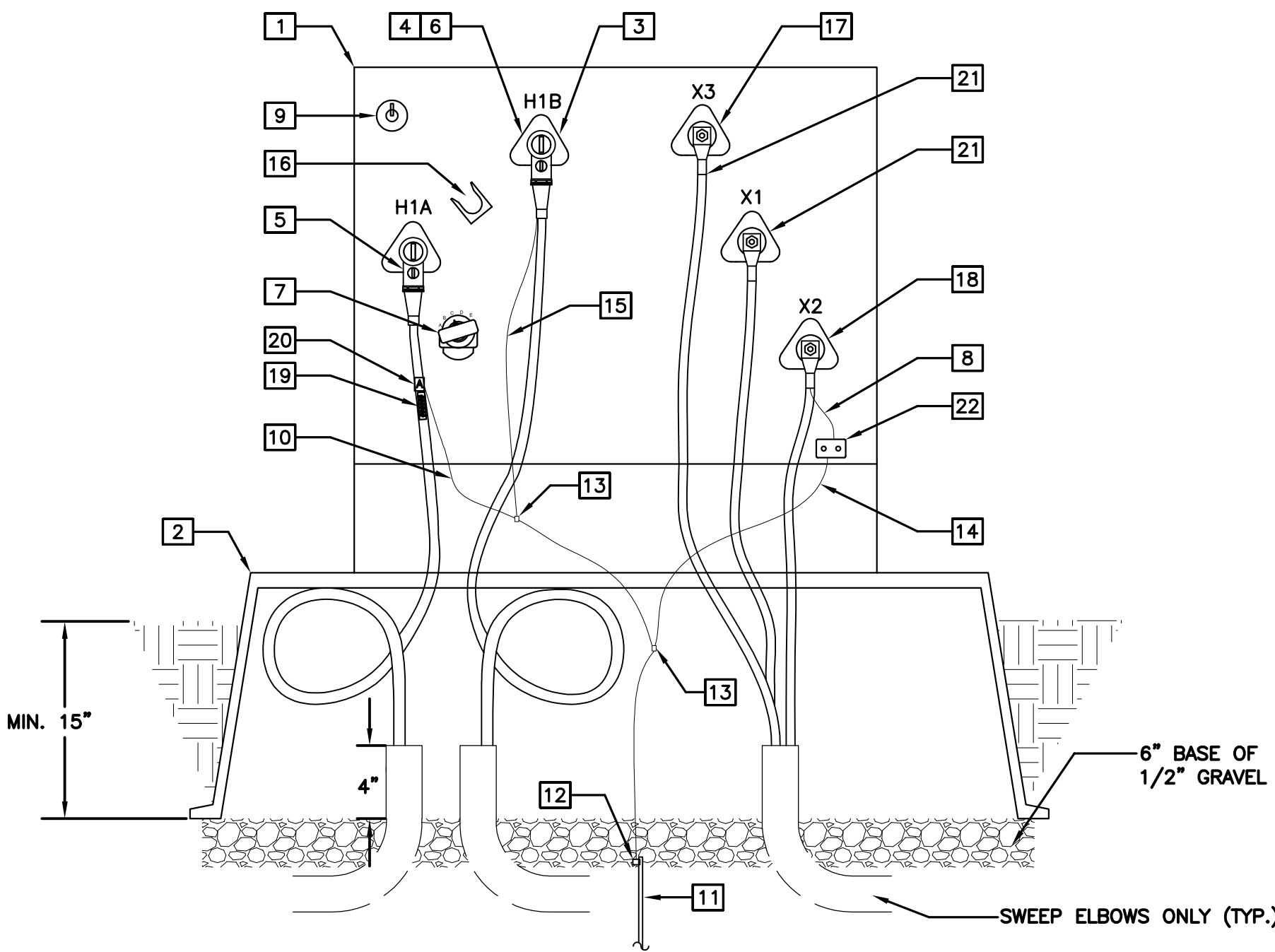
TYPICAL LAYOUT
E-101|E-001 SCALE : NTS

SYMBOLS LEGEND:

- | | |
|--------|--|
| | DUPLEX RECEPTACLE, 20A, 3-WIRE GROUNDING TYPE, MTD. AT 18" AFF TO CENTERLINE U.N.O. |
| | DUPLEX RECEPTACLE GROUND FAULT CIRCUIT INTERRUPTER, 20A, MTD. AT 18" AFF TO CENTERLINE U.N.O. |
| | HOME RUN TO PANEL (INDICATED BY DESIGNATION) NO. OF CIRCUITS IN ONE CONDUIT INDICATED BY NO. OF ARROWS. CURVED DASH INDICATES GROUND, LONG DASH INDICATES NEUTRAL AND SHORT DASH INDICATES A PHASE WIRE. |
| | GROUND CONNECTION |
| | NONFUSED DISCONNECT SWITCH, 30A, 3 POLE, 600V U.N.O. |
| | FUSED DISCONNECT SWITCH, TYPE AND SIZE AS NOTED |
| | PANELBOARD |
| MCA | MINIMUM CIRCUIT AMPACITY |
| AFF | ABOVE FINISHED FLOOR |
| NF | NON-FUSED |
| U.N.O. | UNLESS NOTED OTHERWISE |
| FLA | FULL LOAD AMPS |
| WP | WEATHERPROOF |
| SBTC | SOLID BARE TINNED COPPER |
| REF. | REFERENCE |
| C | CONDUIT |

GENERAL NOTES:

- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND TESTING.
- ALL ELECTRICAL WORK SHALL BE IN COMPLIANCE WITH NEC, NFPA REQUIREMENTS AND APPLICABLE STATE AND LOCAL CODES.
- ALL MATERIAL AND EQUIPMENT FURNISHED SHALL BE NEW AND FIRST QUALITY OF A STANDARD MANUFACTURER.
- ALL WORKMANSHIP SHALL BE FIRST CLASS AND IN ACCORDANCE WITH NECA AND INDUSTRY STANDARDS.
- COORDINATE WITH SITE PERSONNEL DURING DEMOLITION AND CONSTRUCTION TO PROVIDE ADEQUATE SECURITY MEASURES AND APPROPRIATE ACCESS TO EQUIPMENT INSIDE AND OUTSIDE OF BUILDING.
- WORK ON OR IN ENERGIZED EQUIPMENT SHALL BE PROHIBITED.
- ALL 120V CONTROL WIRING SHALL BE INSTALLED IN CONDUIT.
- CONTRACTOR SHALL HAND DIG TO FIND EXACT LOCATION OF UNDERGROUND UTILITIES, EXISTING CONDUITS, AND BURIED FIBER AND CABLE. CONTRACTOR ASSUMES ALL LIABILITY AND EXPENSE FOR DAMAGE TO EXISTING UNDERGROUND UTILITIES OR BURIED FIBER AND CABLE DUE TO THE CONTRACTOR'S OR A SUBCONTRACTOR'S FAILURE TO PROVIDE PROPER PROTECTION OR IDENTIFICATION. CONTRACTOR SHALL CALL LOCAL ONE-CALL UTILITY LOCATE SERVICE PRIOR TO ANY EXCAVATION.
- SIZE AND INSTALL ALL JUNCTION AND PULL BOXES FOR A COMPLETE AND CORRECT INSTALLATION PER THE NEC. LARGER BOXES SHALL BE COORDINATED WITH ALL DISCIPLINES PRIOR TO INITIATING WORK TO AVOID CONFLICTS.
- ALL 120 VOLT CIRCUITS LONGER THAN 100 FEET IN LENGTH SHALL USE #10 AWG CONDUCTORS.
- ALL CIRCUITS SHALL HAVE A SEPARATE GROUND CONDUCTOR SIZED PER N.E.C. SECTION 250.112.
- ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUITRY DIRECTORY WITH TYPED CIRCUIT DESIGNATION CARD UNDER PLASTIC COVER ON THE INSIDE OF EACH PANEL DOOR. ELECTRICAL CONTRACTOR SHALL ALSO FURNISH AND INSTALL NAMEPLATES ON ALL DISCONNECTS SWITCHES, PANELBOARDS AND SWITCHBOARDS.
- ELECTRICAL CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND PERFORM ALL WORK AND SERVICES NECESSARY FOR OR INCIDENTAL TO THE FURNISHING AND INSTALLATION, COMPLETE OF ALL WIRING MATERIALS AND METHODS AS SHOWN ON THE DRAWINGS AND AS SPECIFIED, IN ACCORDANCE WITH PROVISIONS OF THE CONTRACT DOCUMENTS AND COMPLETELY COORDINATED WITH WORK OF ALL OTHER TRADES.
- ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRING STALLED AND PLASTIC GROMMET.
- ELECTRICAL CONTRACTOR SHALL FLAG NEW PEDESTAL LOCATIONS/LAYOUT FOR APPROVAL PRIOR TO ROUGH-IN.
- INSTALL "BURIED UTILITY" WARNING TAPE 12" ABOVE ALL UNDERGROUND ELECTRICAL UTILITIES.



REF. SPECIFICATION FOR ADDITIONAL GROUNDING REQUIREMENTS

TRANSFORMER GROUNDING DETAIL
E-101|E-001 SCALE : NTS



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NEW CAMPGROUND

MISSOURI STATE
FAIRGROUNDS
2503 W. 16th STREET
SEDALIA, MO 65301

PROJECT # F1901-01
SITE # 1501
ASSET # 3511501140

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 08/22/2019

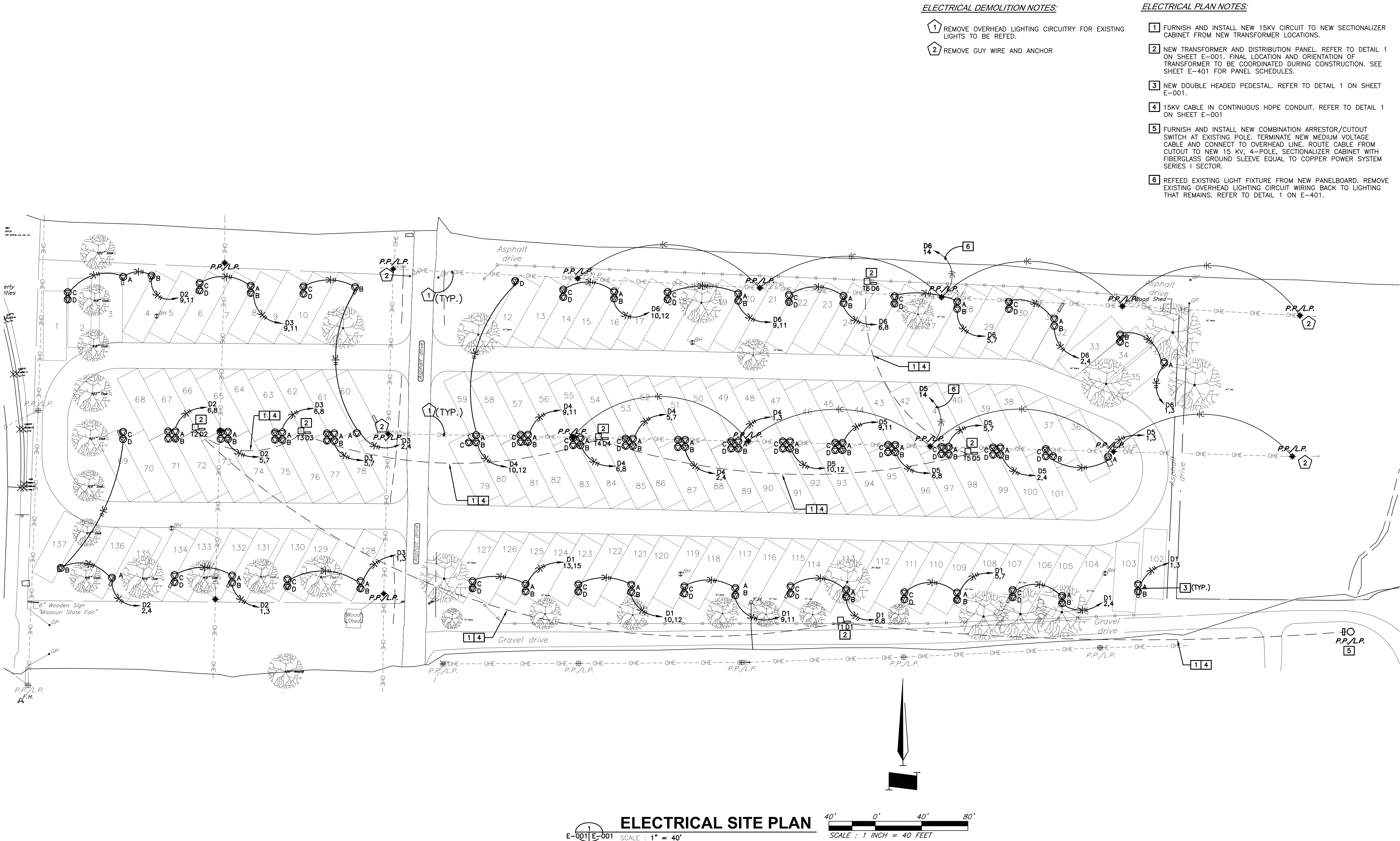
CAD DWG FILE: F1901-01-1501-E-101
DRAWN BY: BJC
CHECKED BY: TOH
DESIGNED BY: TOH/BJC

SHEET TITLE:
Campground &
Utility Plan

SHEET NUMBER:

E-101

SHEET 12 OF 14
08/22/2019



ELECTRICAL SITE PLAN
E-001 | E-001 SCALE : 1" = 40'
40' 0' 40' 80'
SCALE : 1 INCH = 40 FEET

NEW PANEL: D1						KAIC: 22 MAIN: 800 A FED FROM: T1 MOUNTING: SURFACE BUS RATING: 800 A					
ENCLOSURE: NEMA 3R 120/240V, 1 PHASE, 3 WIRE											
EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B	EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B
CIRCUIT 1	100	1 3	A B	2 4	200	CIRCUIT 2	200	1 3	A B	2 4	200
CIRCUIT 3	200	5 7	A B	6 8	200	CIRCUIT 4	200	5 7	A B	6 8	200
CIRCUIT 5	200	9 11	A B	10 12	200	CIRCUIT 6	200	9 11	A B	10 12	200
CIRCUIT 7	200	13 15	A B	14 16		SPARE		13 15	A B	14 16	
SPARE		17 19	A B	18 20		SPARE		17 19	A B	18 20	
SPARE		21 23	A B	22 24		SPARE		21 23	A B	22 24	

NEW PANEL: D2						KAIC: 22 MAIN: 800 A FED FROM: T2 MOUNTING: SURFACE BUS RATING: 800 A					
ENCLOSURE: NEMA 3R 120/240V, 1 PHASE, 3 WIRE											
EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B	EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B
CIRCUIT 1	200	1 3	A B	2 4	200	CIRCUIT 2	200	1 3	A B	2 4	200
CIRCUIT 3	200	5 7	A B	6 8	200	CIRCUIT 4	200	5 7	A B	6 8	200
CIRCUIT 5	200	9 11	A B	10 12		SPARE		9 11	A B	10 12	
SPARE		13 15	A B	14 16		SPARE		13 15	A B	14 16	
SPARE		17 19	A B	18 20		SPARE		17 19	A B	18 20	
SPARE		21 23	A B	22 24		SPARE		21 23	A B	22 24	

NEW PANEL: D3						KAIC: 22 MAIN: 800 A FED FROM: T3 MOUNTING: SURFACE BUS RATING: 800					
ENCLOSURE: NEMA 3R 120/240V, 1 PHASE, 3 WIRE											
EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B	EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B
CIRCUIT 1	200	1 3	A B	2 4	200	CIRCUIT 2	200	1 3	A B	2 4	200
CIRCUIT 3	200	5 7	A B	6 8	200	CIRCUIT 4	200	5 7	A B	6 8	200
CIRCUIT 5	200	9 11	A B	10 12		SPARE		9 11	A B	10 12	
SPARE		13 15	A B	14 16		SPARE		13 15	A B	14 16	
SPARE		17 19	A B	18 20		SPARE		17 19	A B	18 20	
SPARE		21 23	A B	22 24		SPARE		21 23	A B	22 24	

NEW PANEL: D4						KAIC: 22 MAIN: 800 A FED FROM: T4 MOUNTING: SURFACE BUS RATING: 800 A					
ENCLOSURE: NEMA 3R 120/240V, 1 PHASE, 3 WIRE											
EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B	EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B
CIRCUIT 1	200	1 3	A B	2 4	200	CIRCUIT 2	200	1 3	A B	2 4	200
CIRCUIT 3	200	5 7	A B	6 8	200	CIRCUIT 4	200	5 7	A B	6 8	200
CIRCUIT 5	200	9 11	A B	10 12	200	CIRCUIT 6	200	9 11	A B	10 12	200
SPARE		13 15	A B	14 16		SPARE		13 15	A B	14 16	
SPARE		17 19	A B	18 20		SPARE		17 19	A B	18 20	
SPARE		21 23	A B	22 24		SPARE		21 23	A B	22 24	

NEW PANEL: D5						KAIC: 22 MAIN: 800 A FED FROM: T5 MOUNTING: SURFACE BUS RATING: 800 A					
ENCLOSURE: NEMA 3R 120/240V, 1 PHASE, 3 WIRE											
EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B	EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B
CIRCUIT 1	200	1 3	A B	2 4	200	CIRCUIT 2	200	1 3	A B	2 4	200
CIRCUIT 3	200	5 7	A B	6 8	200	CIRCUIT 4	200	5 7	A B	6 8	200
CIRCUIT 5	200	9 11	A B	10 12	200	CIRCUIT 6	200	9 11	A B	10 12	200
SPARE		13 15	A B	14 16	30	LIGHT POLE CIRCUIT		13 15	A B	14 16	30
SPARE		17 19	A B	18 20		SPARE		17 19	A B	18 20	
SPARE		21 23	A B	22 24		SPARE		21 23	A B	22 24	

NEW PANEL: D6						KAIC: 22 MAIN: 800 A FED FROM: T6 MOUNTING: SURFACE BUS RATING: 800 A					
ENCLOSURE: NEMA 3R 120/240V, 1 PHASE, 3 WIRE											
EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B	EQUIPMENT DESCRIPTION	C/B	CCT	PH	CCT	C/B
CIRCUIT 1	150	1 3	A B	2 4	200	CIRCUIT 2	200	1 3	A B	2 4	200
CIRCUIT 3	200	5 7	A B	6 8	200	CIRCUIT 4	200	5 7	A B	6 8	200
CIRCUIT 5	200	9 11	A B	10 12	200	CIRCUIT 6	200	9 11	A B	10 12	200
SPARE		13 15	A B	14 16	30	LIGHT POLE CIRCUIT		13 15	A B	14 16	30
SPARE		17 19	A B	18 20		SPARE		17 19	A B	18 20	
SPARE		21 23	A B	22 24		SPARE		21 23	A B	22 24	

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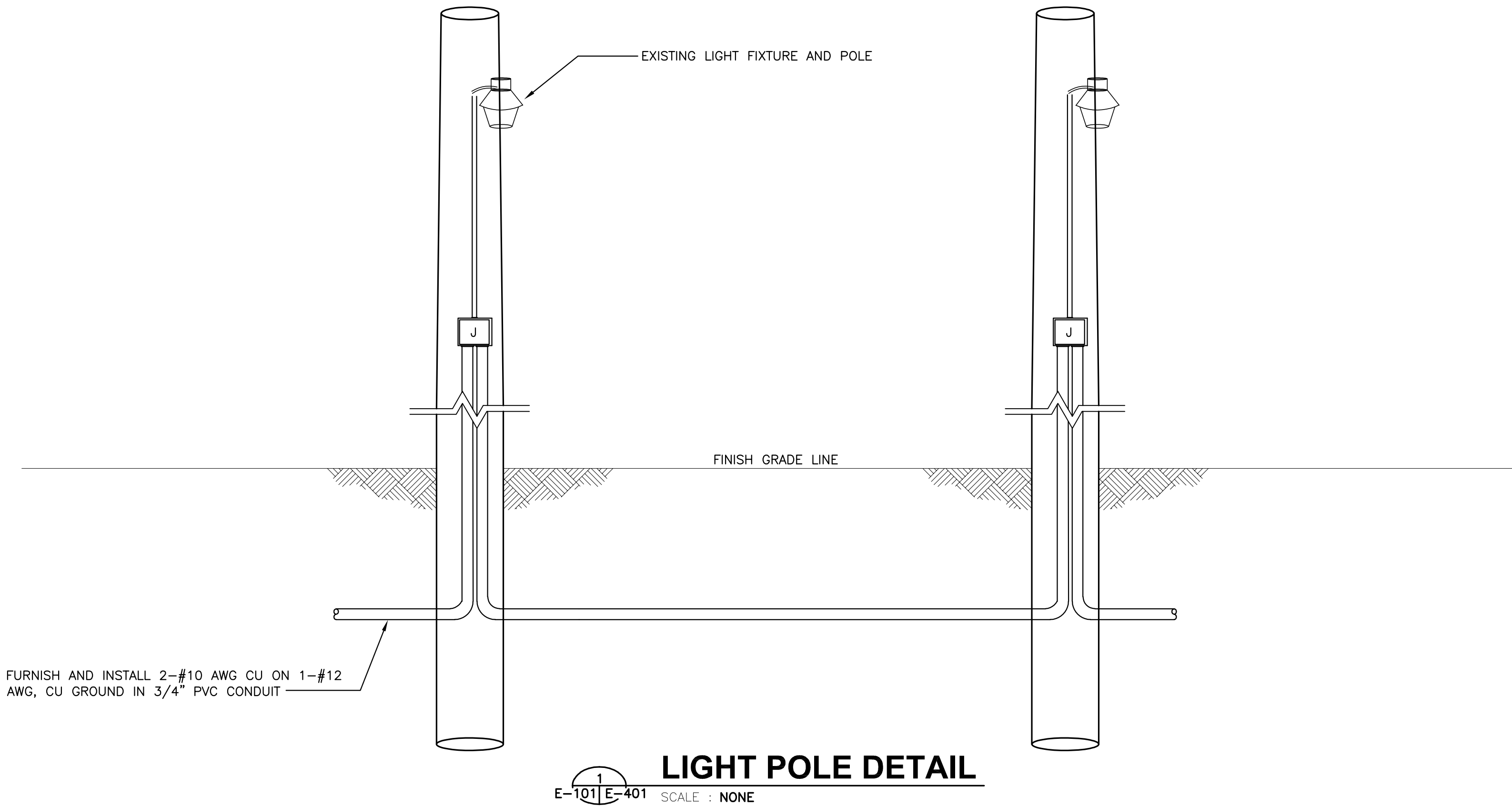
E-101E-401

SCALE : NONE

NEW PANELBOARD SCHEDULES

NOTE:

1. FURNISH AND INSTALL TYPED PANEL SCHEDULES.



1

E-101E-401

SCALE : NONE

LIGHT POLE DETAIL

